

1002603-103001

HU: MGSDVRDLNALLPAVPSLGGGGGCLPVSGAAQWAPVLDFAAPPASAYGSL
MO: MGSDVRDLNALLPAVSSLGGGGGCLPVSGAAQWAPVLDFAAPPASAYGSL

HU: GGPAPPPAPPPPPPPHSFIKQEPSWGGAEPEEQCLSAFTVHFSGQFTGTAG
MO: GGPAPPPAPPPPPPPHSFIKQEPSWGGAEPEEQCLSAFTLHFSGQFTGTAG

HU: ACRYGPGPPPPSQASSGOARMFPNAPYLPSCLESQPAIRNQYSTVTFDGTSP
MO: ACRYGPGPPPPSQASSGOARMFPNAPYLPSCLESQPTIRNQYSTVTFDGAPS

HU: YGHTPSHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCTG
MO: YGHTPSHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCTG

HU: SQALLLRTPYSSDNLQMTSQLECMTNQMNLGATLKGVAAGSSSVKWTE
MO: SQALLLRTPYSSDNLQMTSQLECMTNQMNLGATLKGMAAGSSSVKWTE

HU: GQSNHSTGYESDNHTTILCGAQYRIHTGVFRGIQDVRVPGVAPTLVRSAS
MO: GQSNHGIGYESDNHTAPILCGAQYRIHTGVFRGIQDVRVSGVAPTLVRSAS

HU: ETSEKRPFCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSR
MO: ETSEKRPFCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSR

HU: SDQLKRHRHTGVKPFQCKTCQKFSRSDHLKTHTRTHTGKTSEKPFSCR
MO: SDQLKRHRHTGVKPFQCKTCQKFSRSDHLKTHTRTHTGKTSEKPFSCR

HU: WPSCQKKFARSDELVRHHNMHQRNMTKLQAL
MO: WHSCQKKFARSDELVRHHNMHQRNMTKLHVAL

Fig. 1



Fig. 2

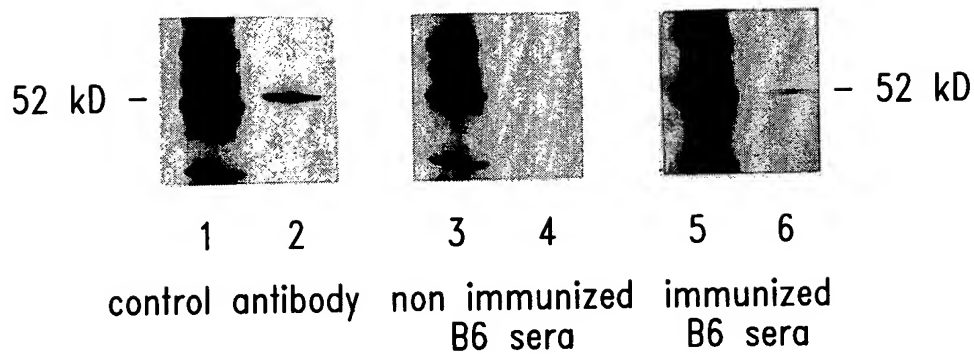


Fig. 3

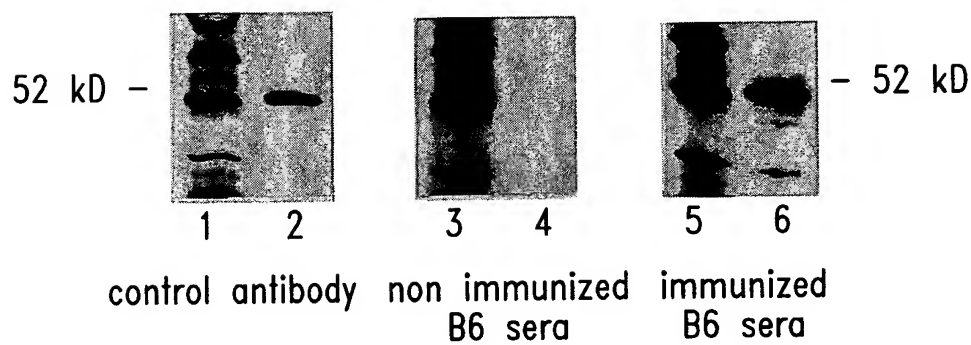


Fig. 4

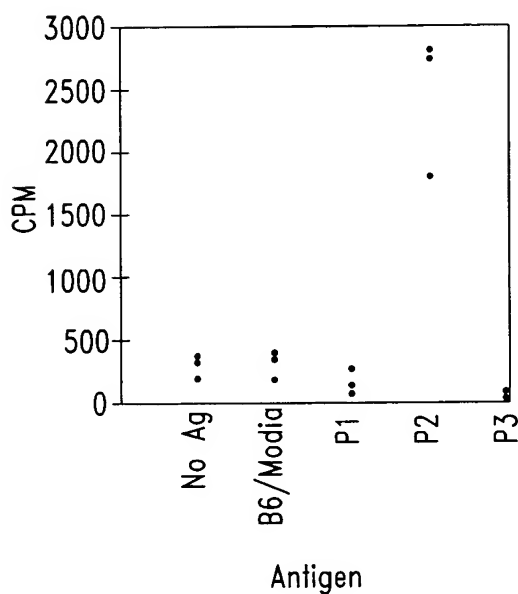


Fig. 5A

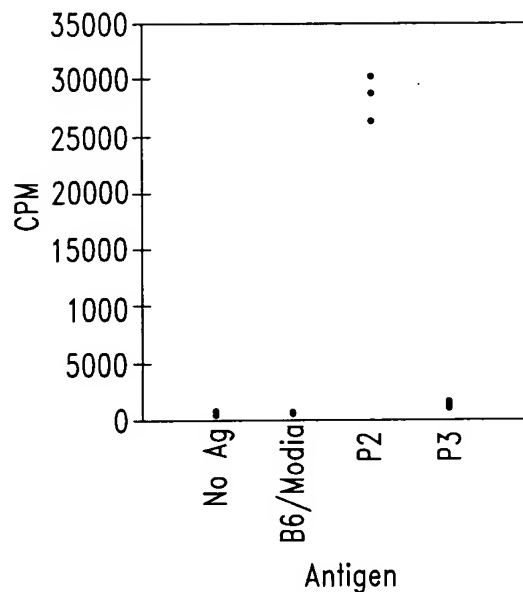


Fig. 5B

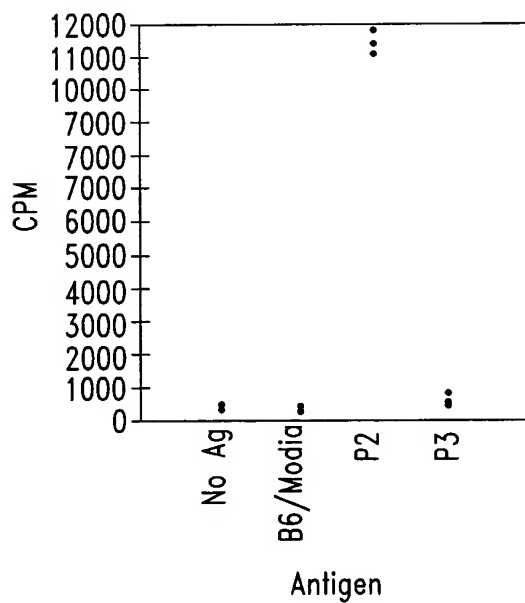


Fig. 5C

Figure 6A

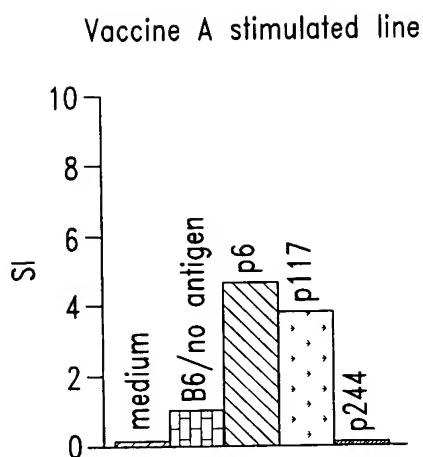


Fig. 6A

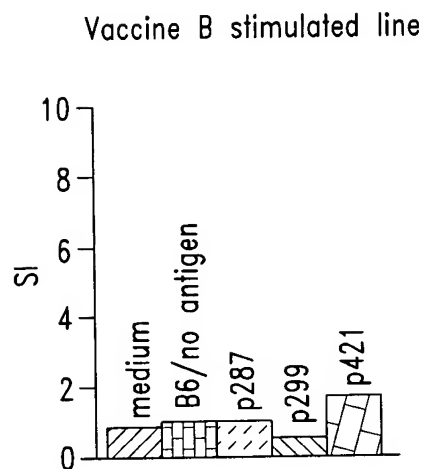


Fig. 6B

p117-139 stimulated line

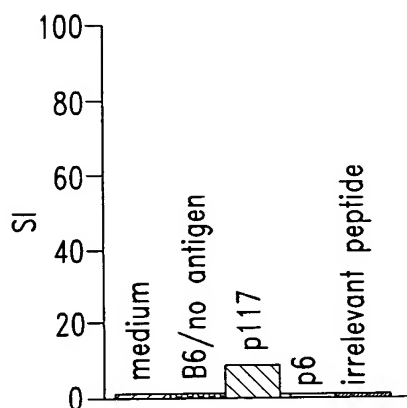


Fig. 7A

p117-139 stimulated clone

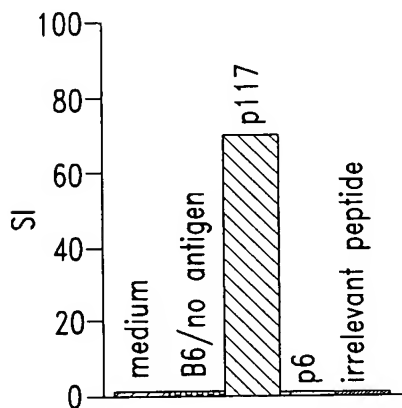


Fig. 7B

p6-22 stimulated line

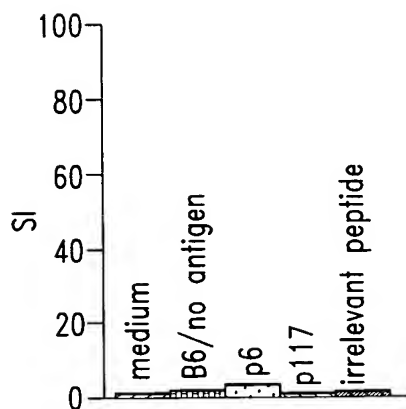


Fig. 7C

p6-22 stimulated clone

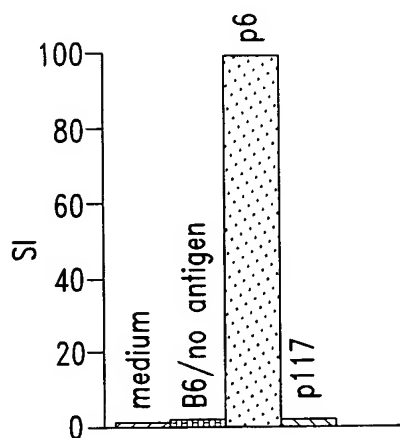


Fig. 7D

FIG. 7A-7D

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
MGSDVRDLNALLPAVPSLGGGGGCVSGAAQWAPVLDFAVPGASAYGSLGGPAPPPAPPPPPPPHFSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAA.....
.....RRRR.....
.....
.....
80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEQCLSFTVHFSGQFTGTAGACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYS
.....AAA.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....
.....
155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGTSPYGHTPSHAAQFPNHSFKHEDPMGQGSLSGEQQYSVPPVYGCHTPTDCTGSQALLRTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDD.....
.....
.....
230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQCMTWNQMNLGATLKGVAAGSSSVKWTGQSNHSTGYESDNHTTPILCGAQYRIHTGVFRGIQDV
AAAAAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDD.....
.....dddd.....
.....
305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVPGVAPTLVRSASETSEKRFMCAYPGCNKRYFKLSHLQMSRKHTGEKPYQCDKDCERRFSRSDQLKRHR
AAAAA.AAAAAAAAAA.....AAAA.AAAAAAAAAA
.....RRRR.....RRRR.....
.....DDDDDD.....
.....
.....
380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRDLKTHTRHTGKTSEKPFSCRWPSQKKFARSDELVRHHNMHQNMTKLQAL
.....AAAA.AAAA.AA.....AAAA.....AAA.....AAAAA.....AA
.....RRRR.RRRR.....
.....
.....dddddddddd.....

Fig. 8A

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
MGSDVRLNALLPAVSSLGGGGGCLPVSGAAQWAPVLDFAPPGASAYGSLGGPAPPPAPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....

80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEEQLSAFTLHFSGQFTGTAGACRYGPGPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQYS
AAAA AAA AAAAA
RRRR RRRR
DDDDDDDD

```

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGA PSYGH TP SHHAAQF PNHSFKHED PMGQQGSLGEQQYSVPPPVYGHCTPTD SCTGSQLLLRTPYSSDN
AAAAA.....AAAAA.....AA
RRRR.....
DDDDDDDDDDDDDDDD

```

230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLCMTWNQMNLGATLKGMAGSSSVKWTGQSNHGIGYESDNHTAPILCGAQYRIHTHGVRGIQDV
AAAAAAAA. AAA.AAA. AAAAAAAAAA
..... RRRRRRRRRR. RRRR.
DDDDDD. DDDDDDDDDDD. dddddd

```

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVSGVAPTLVRSASETSEKRPFCAYPGCNKRYFKLSHLQMSRKHTGEKPYQCDFKDCERRFSRSDQLKRHR
AAAAA.AAAAAAAAAA.....AAAA.AAAAAAAAAA.
RRRRR.....RRRR.
DDDDDDDDDD.....

```

```

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKF SRSDHLKTHTRTHTGKTSEKPFSCRWHS CQKKFARSDELVRHHNMHQRNMTKLHVAL
.....AAAA.AAAA..AA.....AAAA.....AA.....AAAAAAAA...AAAA.....
.....RRRR..RRRR.....
.....
.....ddddd d d d d d d d d d d.....

```

Fig. 8B

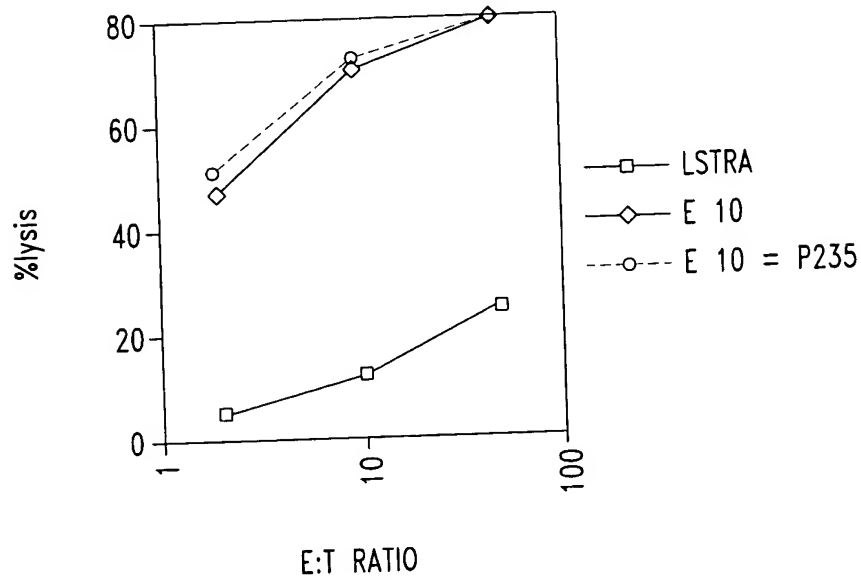


Fig. 9A

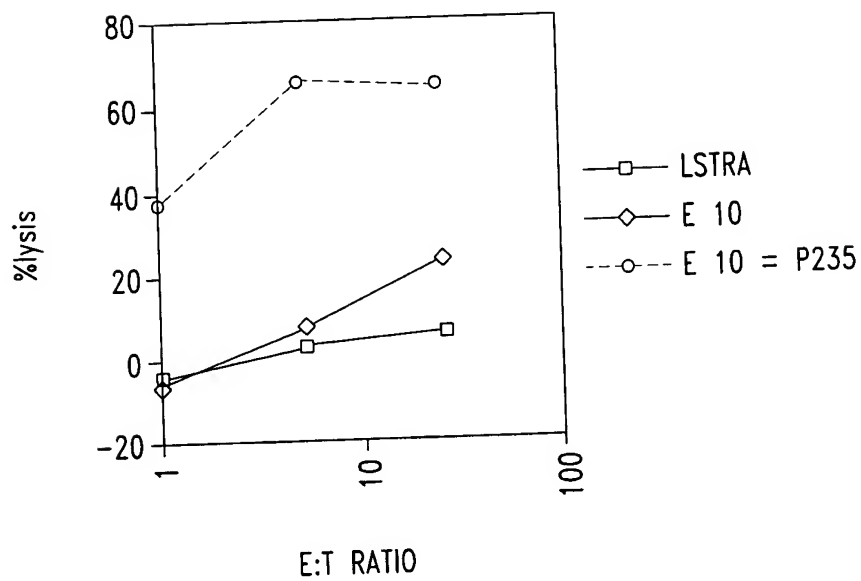


Fig. 9B

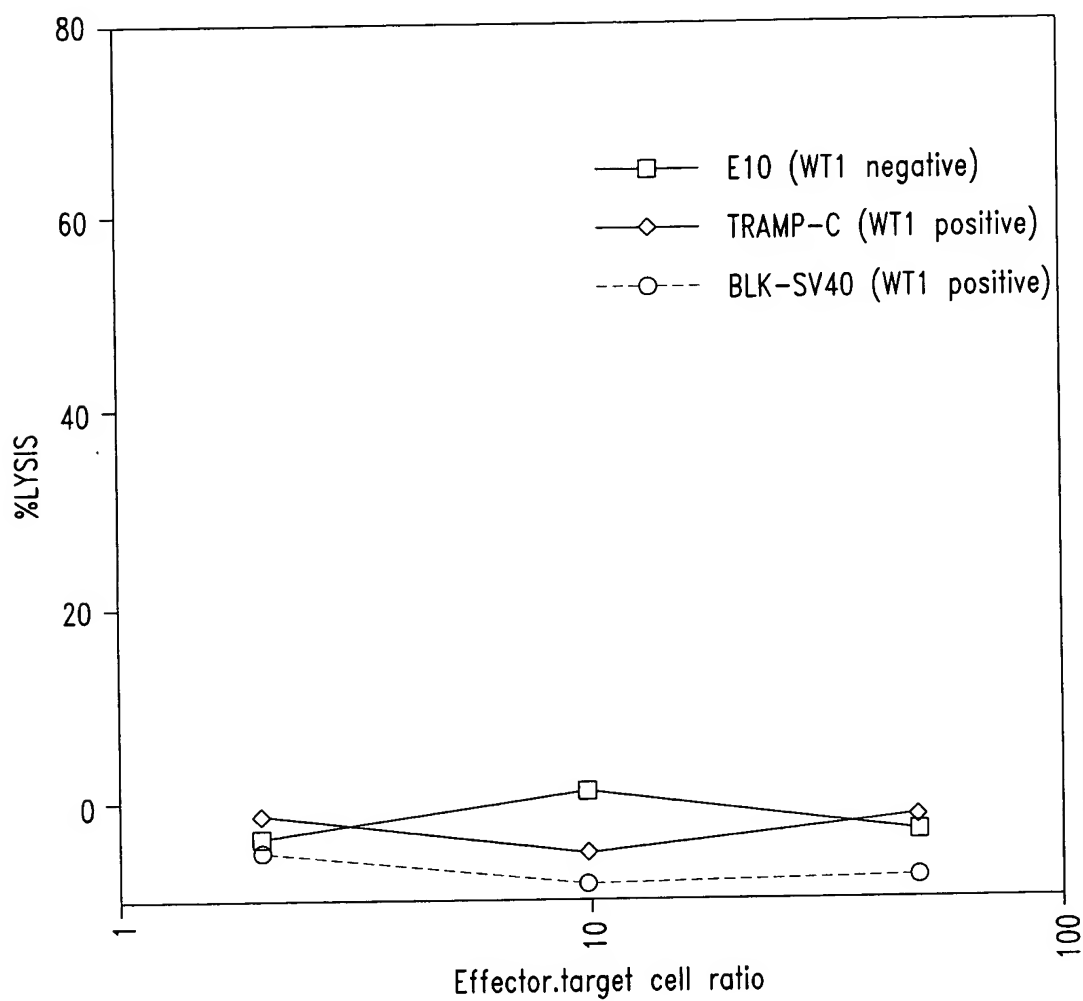


Fig. 10A

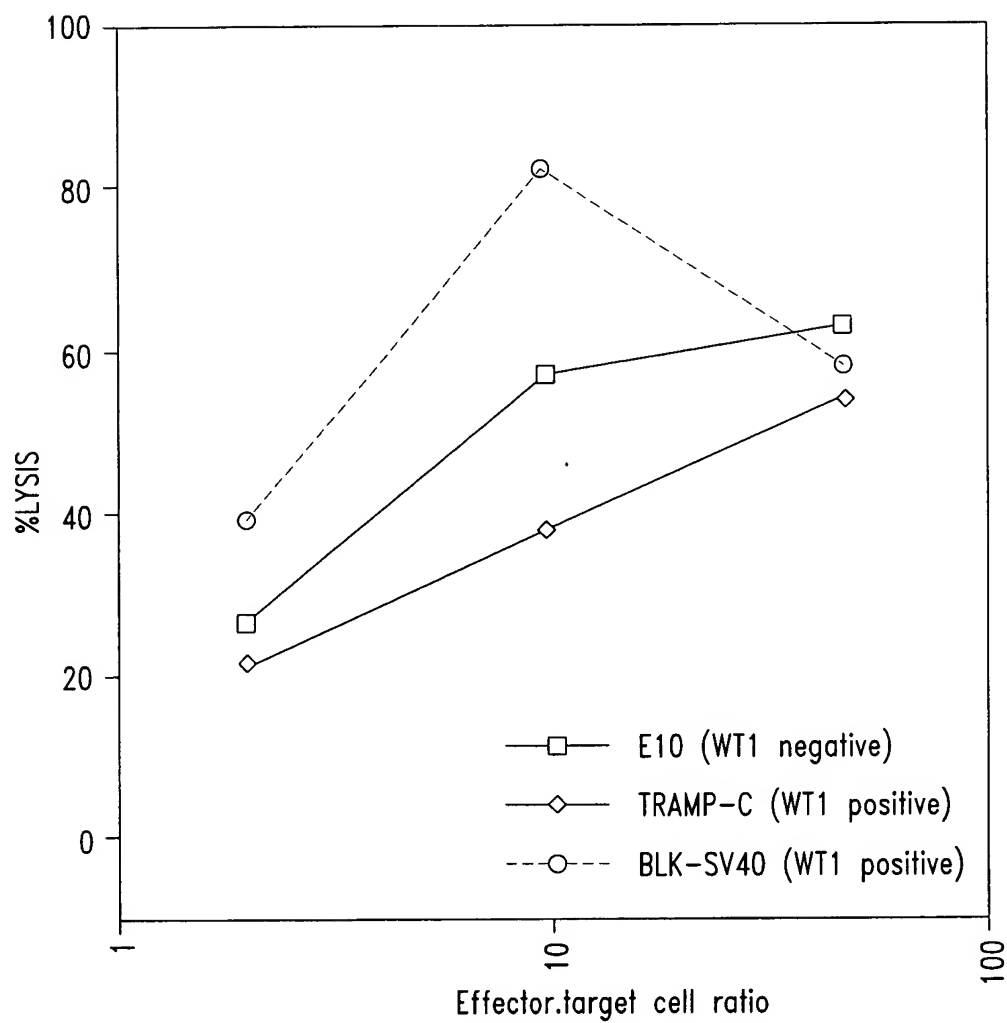


Fig. 10B

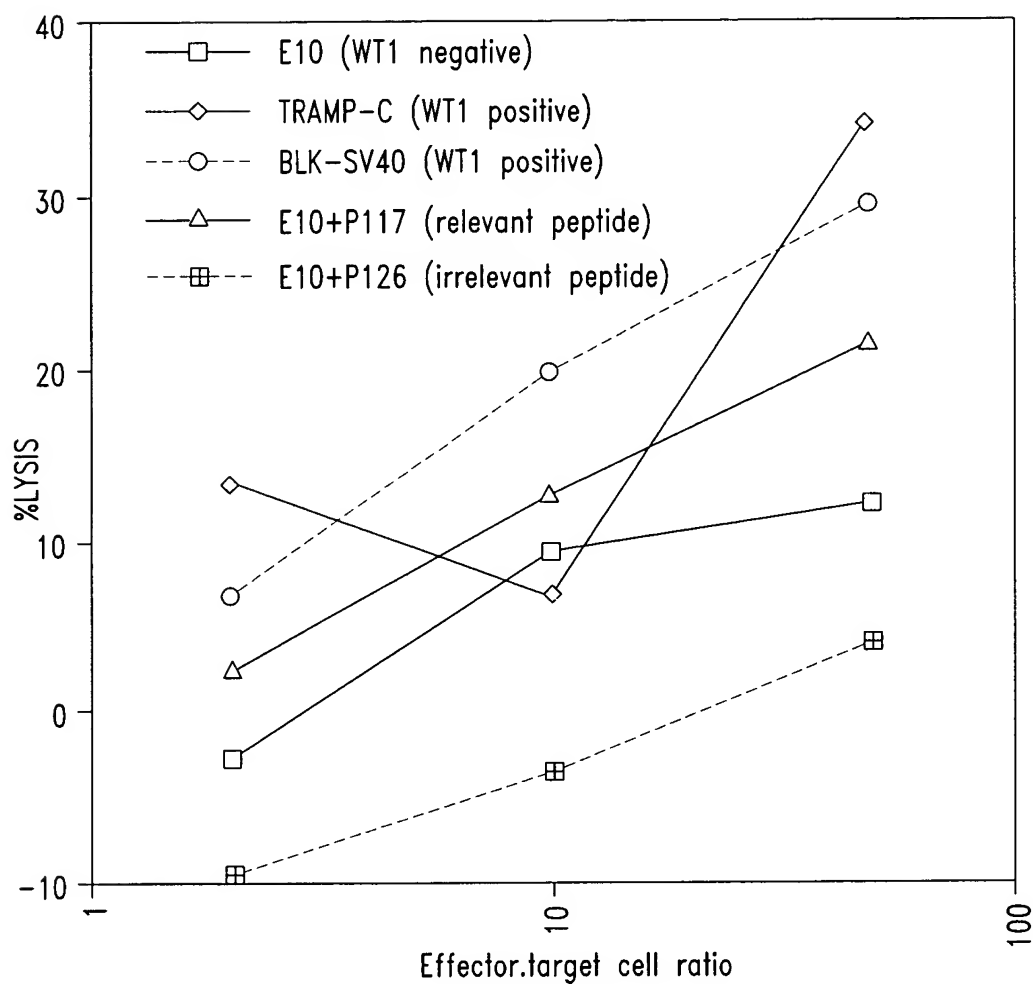


Fig. 10C

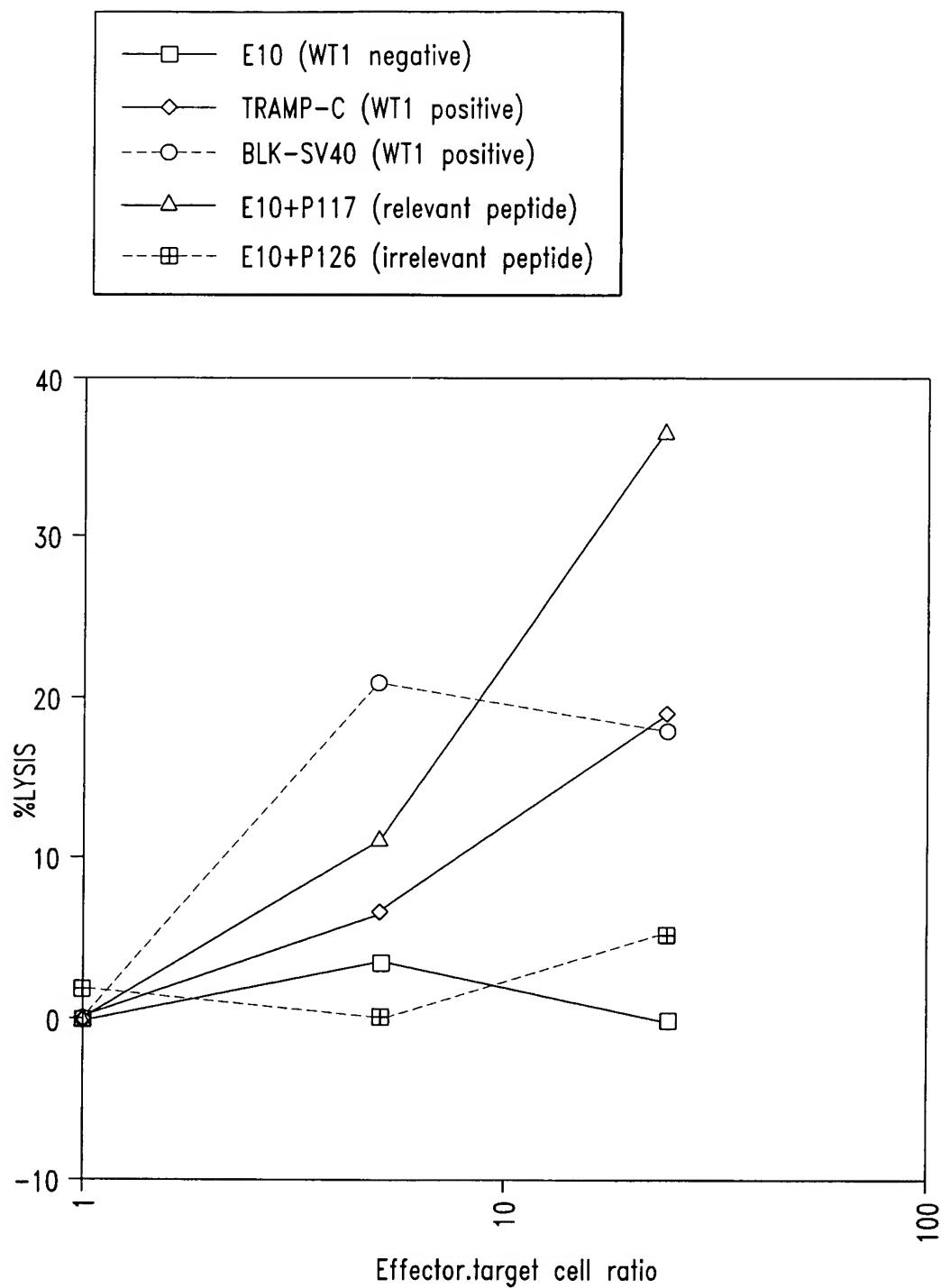
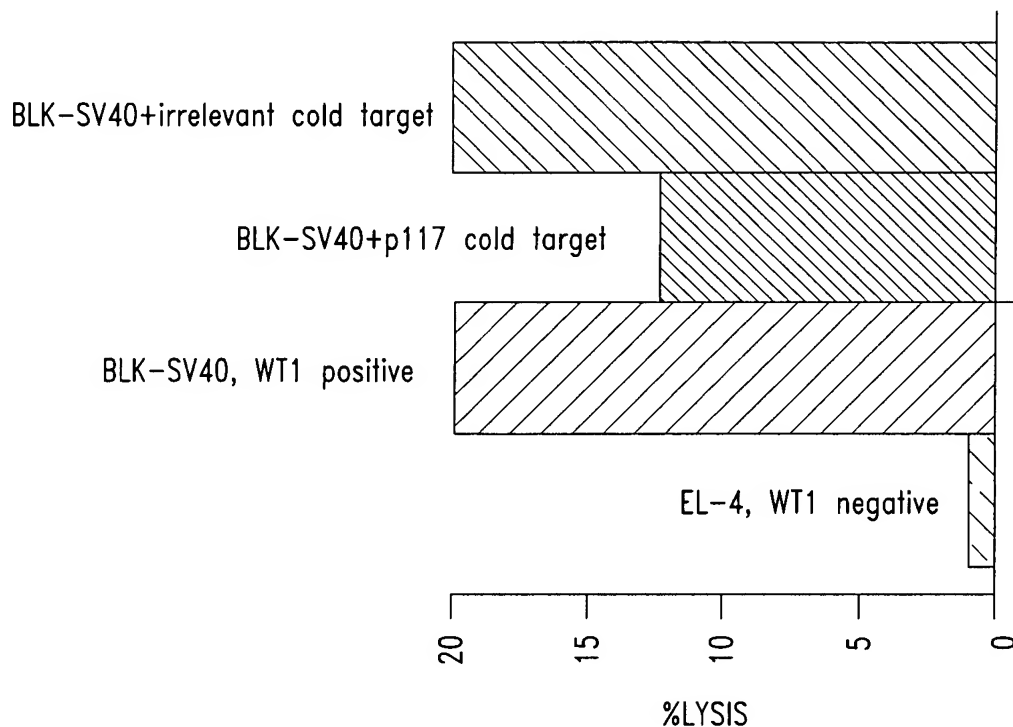


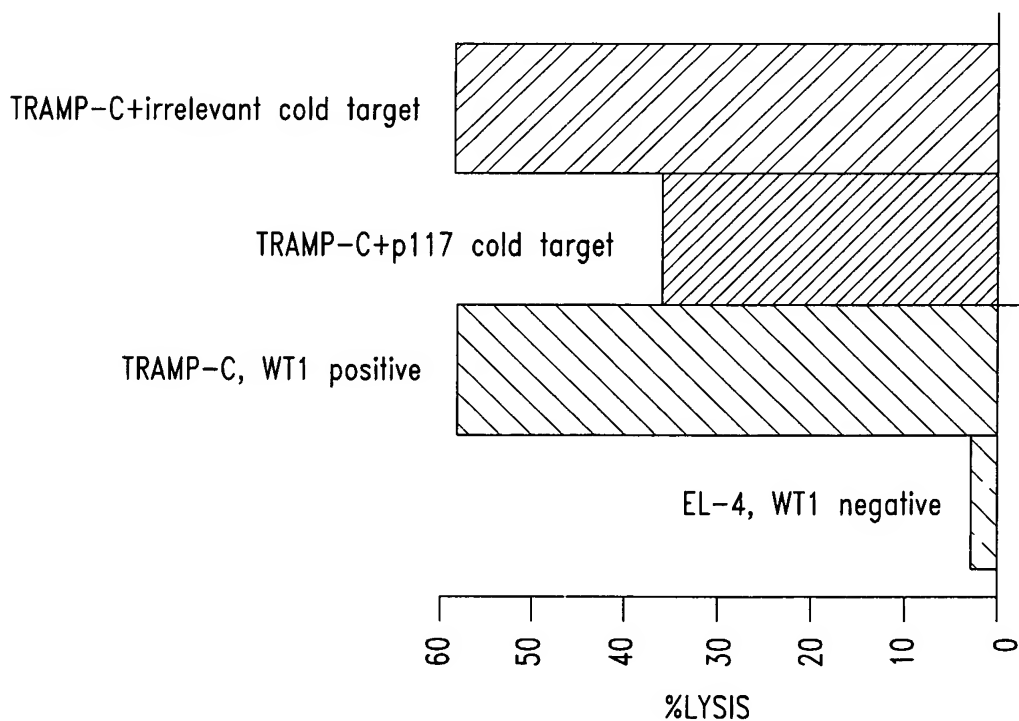
Fig. 10D



FIG. 12B



E:T 25:1
 Fig. 12B



E:T 25:1
 Fig. 12A

FIG. 13A

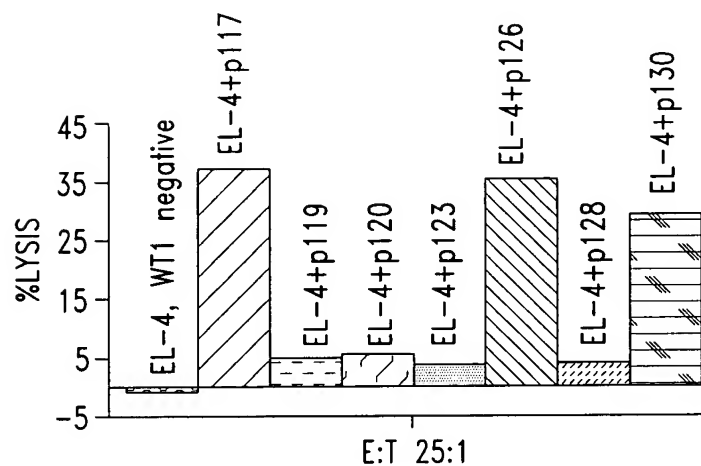


Fig. 13A

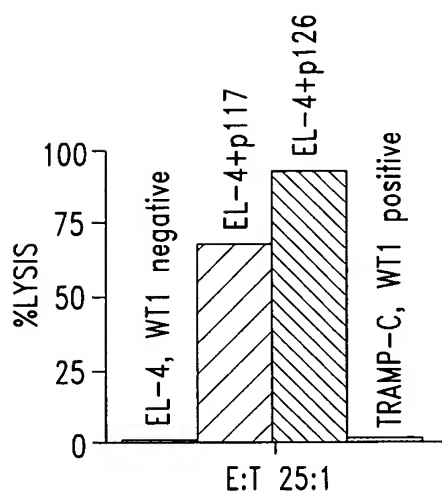


Fig. 13B

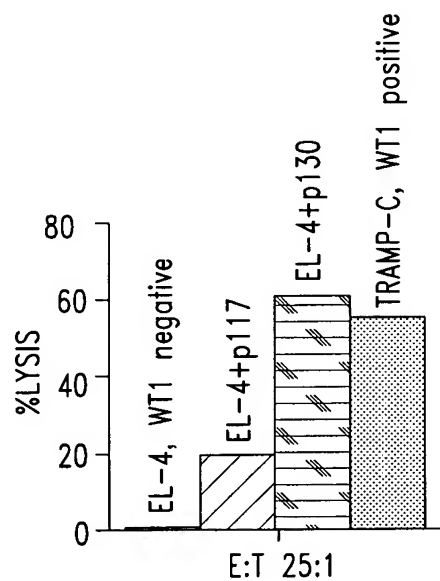


Fig. 13C

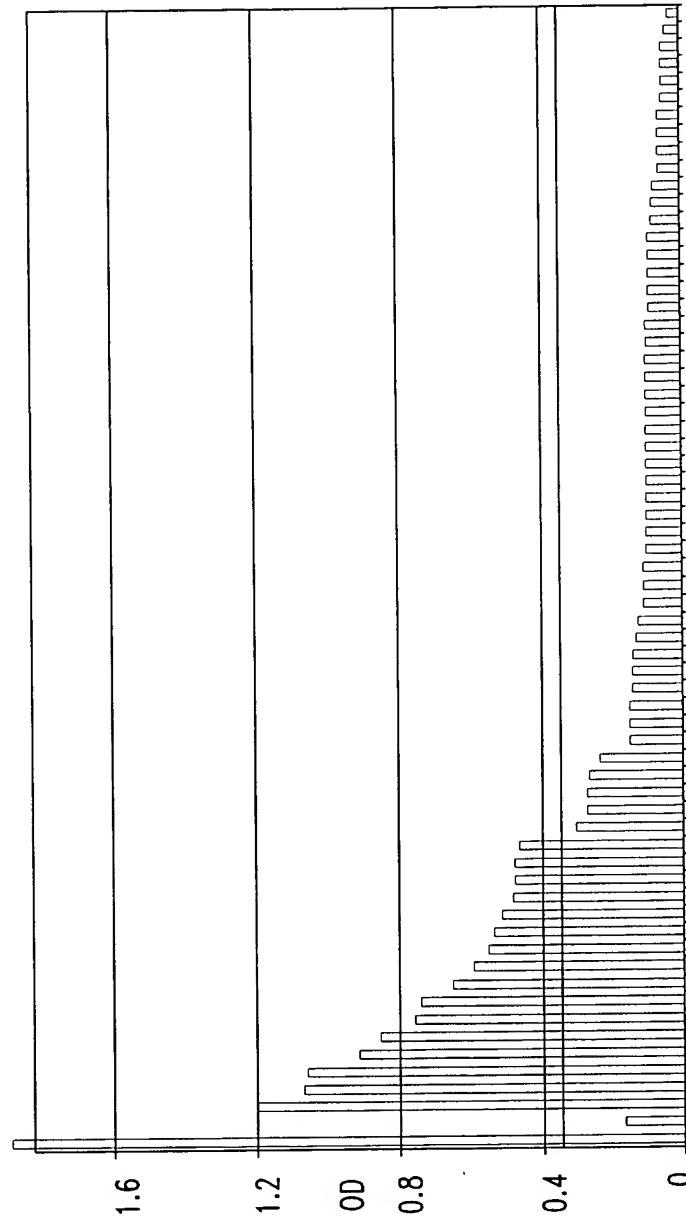


Fig. 14

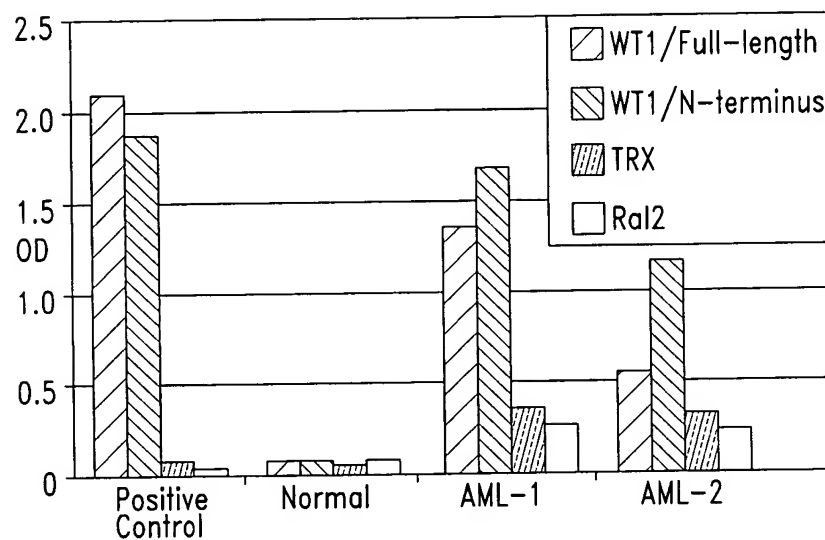


Fig. 15

FIG. 16

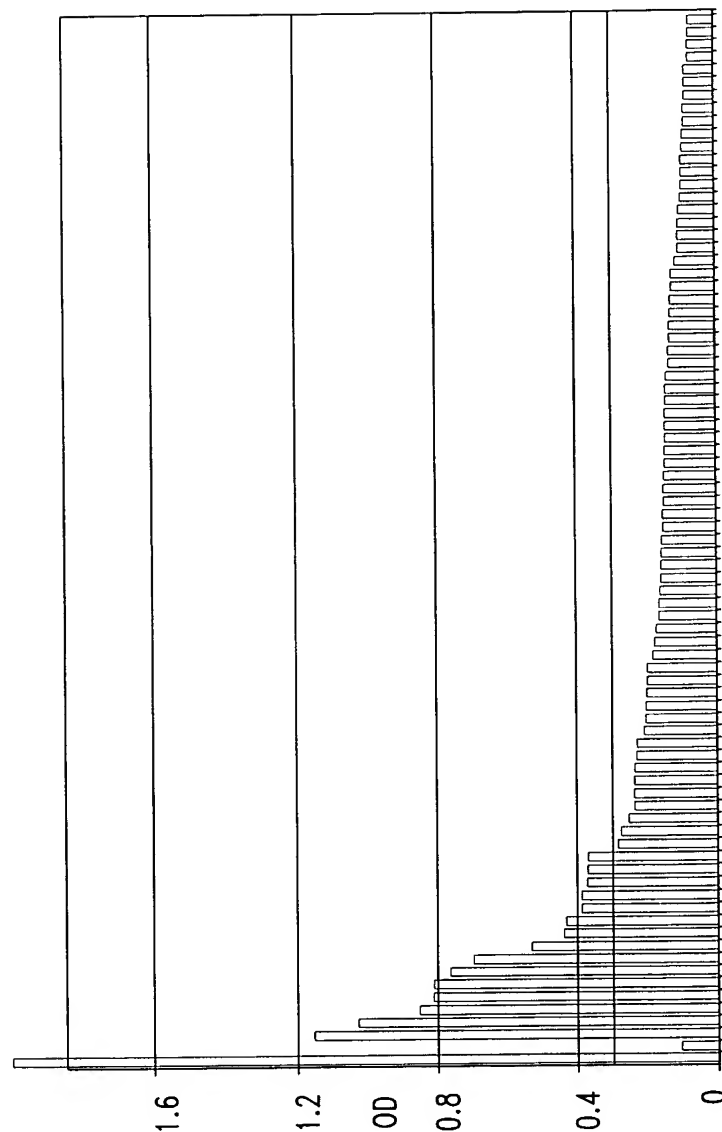


Fig. 16

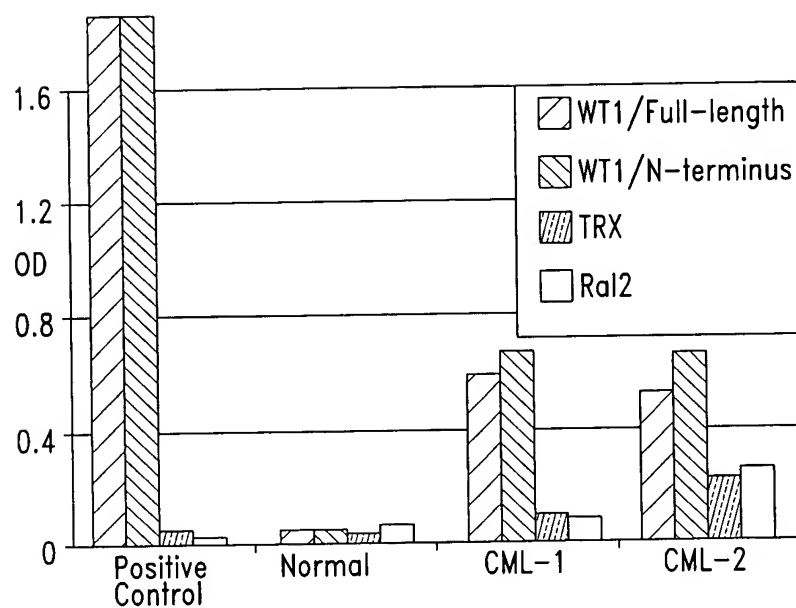


Fig. 17

FIG. 18

TABLE 1: Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

<u>NAME</u>	<u>Recombinant Protein</u>	<u>WT1 Amino Acid Position</u>	<u>Molecular Weight</u>
WT1/full-length	Ral2-WT1 full length fusion protein	aa 1-449	85kDa
WT1/N-terminus	TRX-WT1 N-terminus fusion protein	aa 1-249	60kDa
WT1/C-terminus	WT1 C-terminus protein	aa 267-449	50kDa

Fig. 18

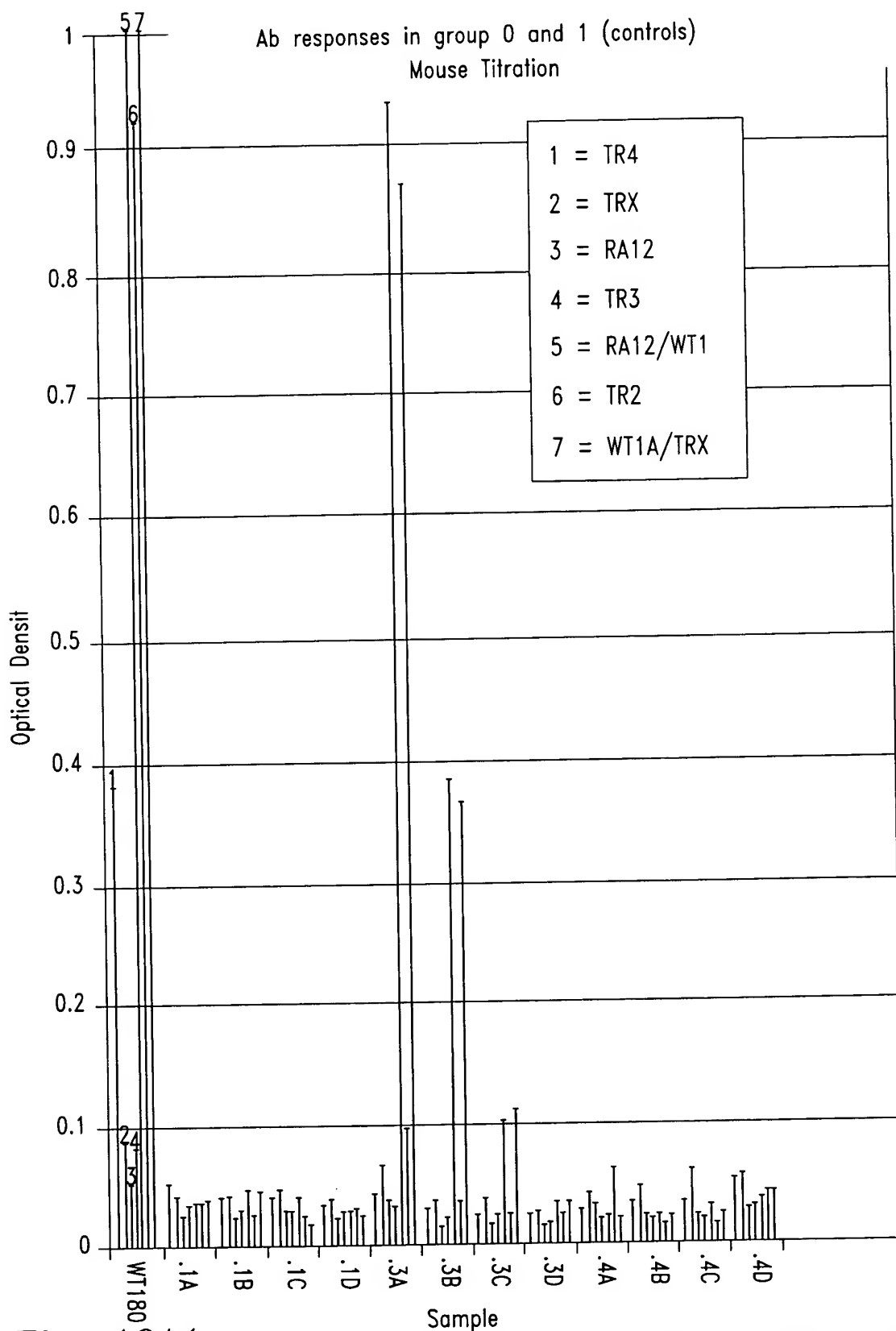


Fig. 19A1

Control groups. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

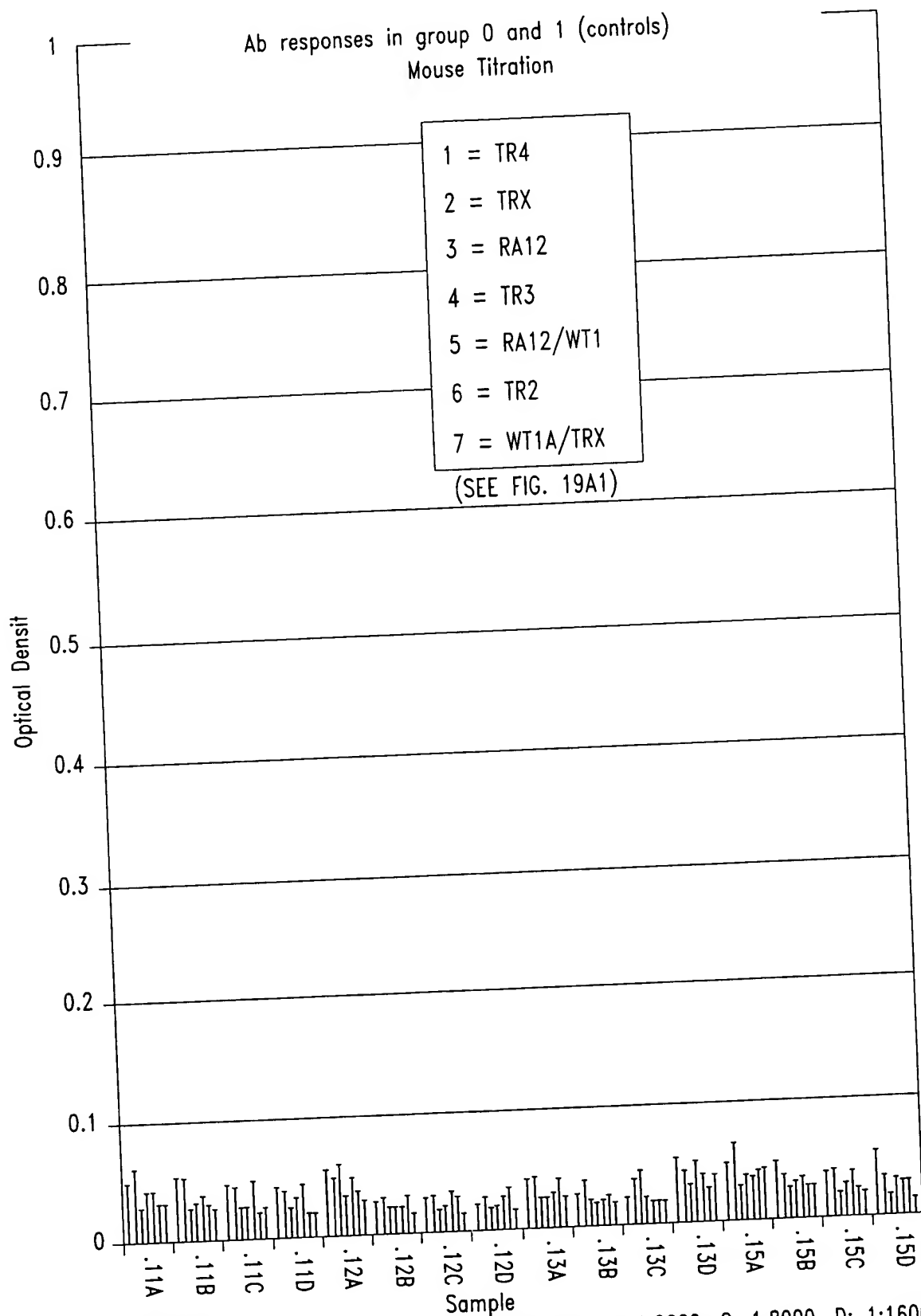


Fig. 19A2

Control groups. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

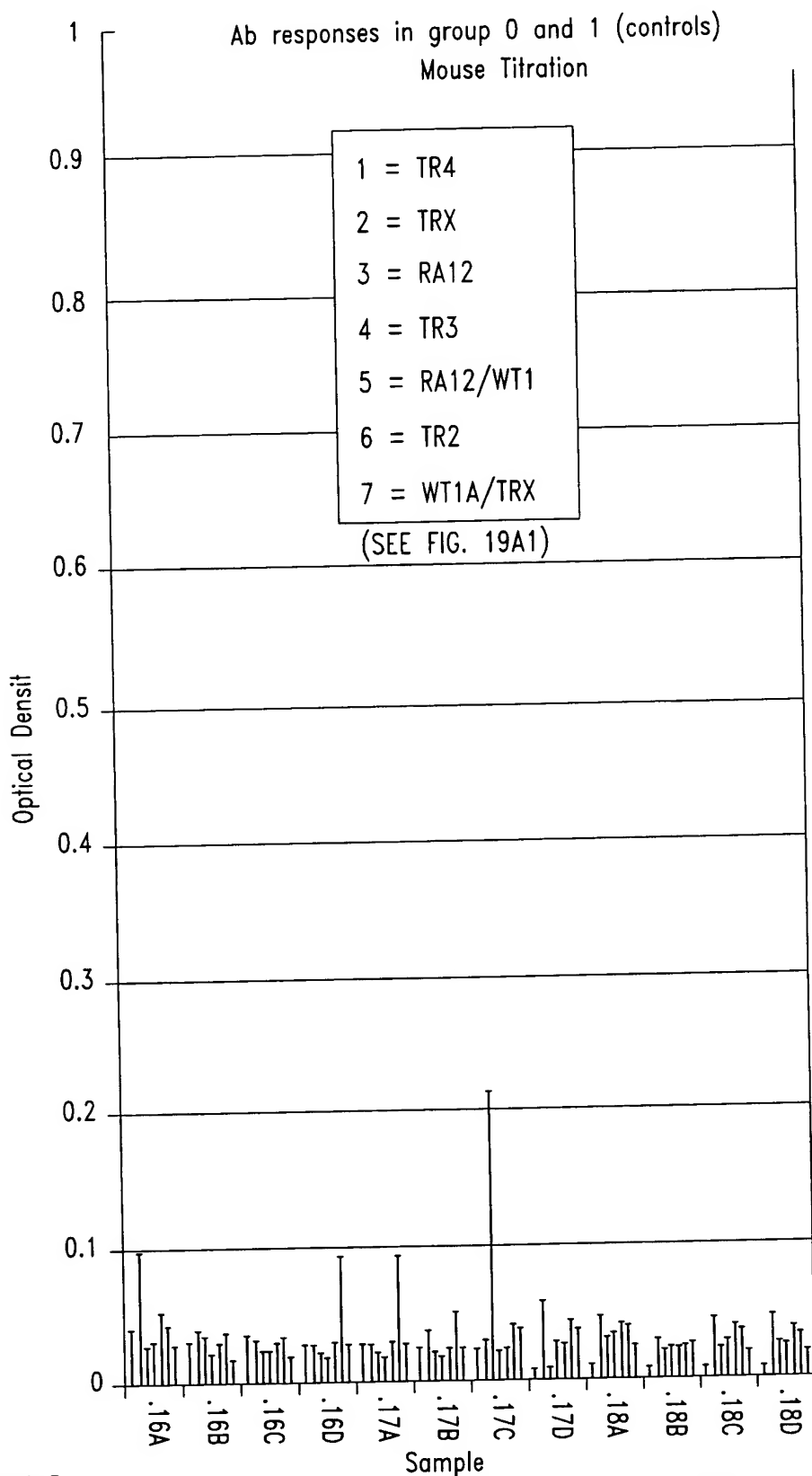


Fig. 19A3 Control groups. A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

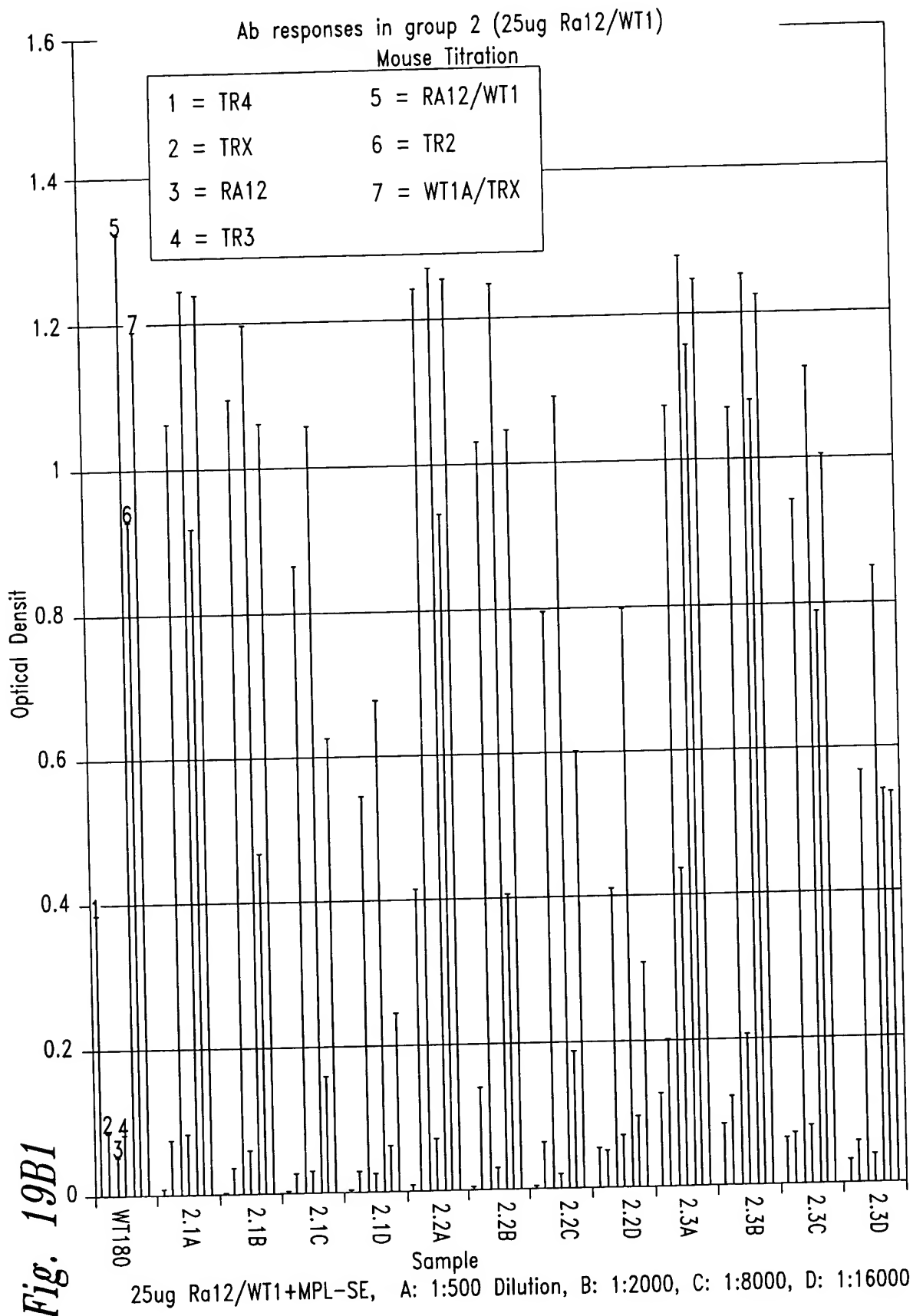
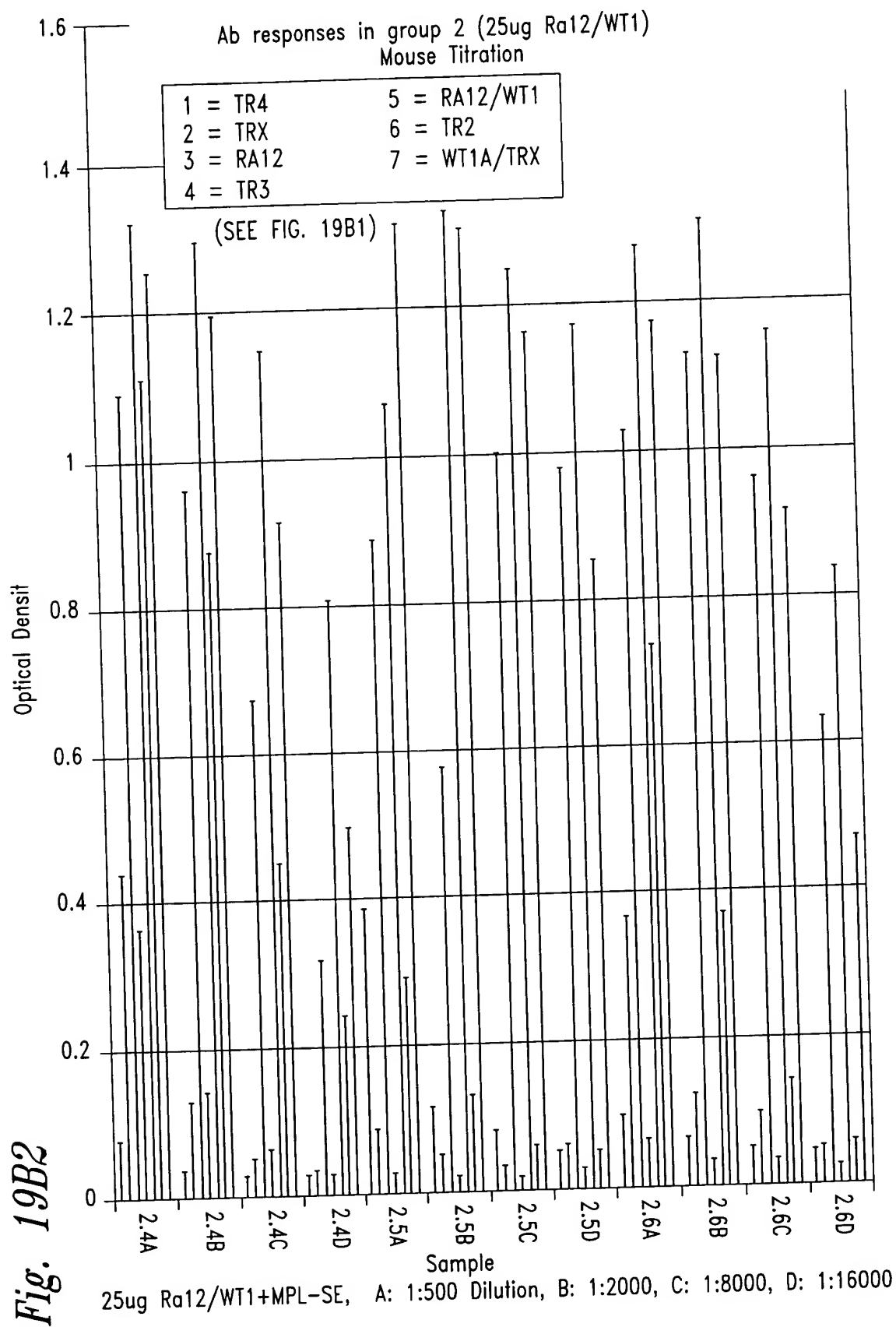


Fig. 19B1



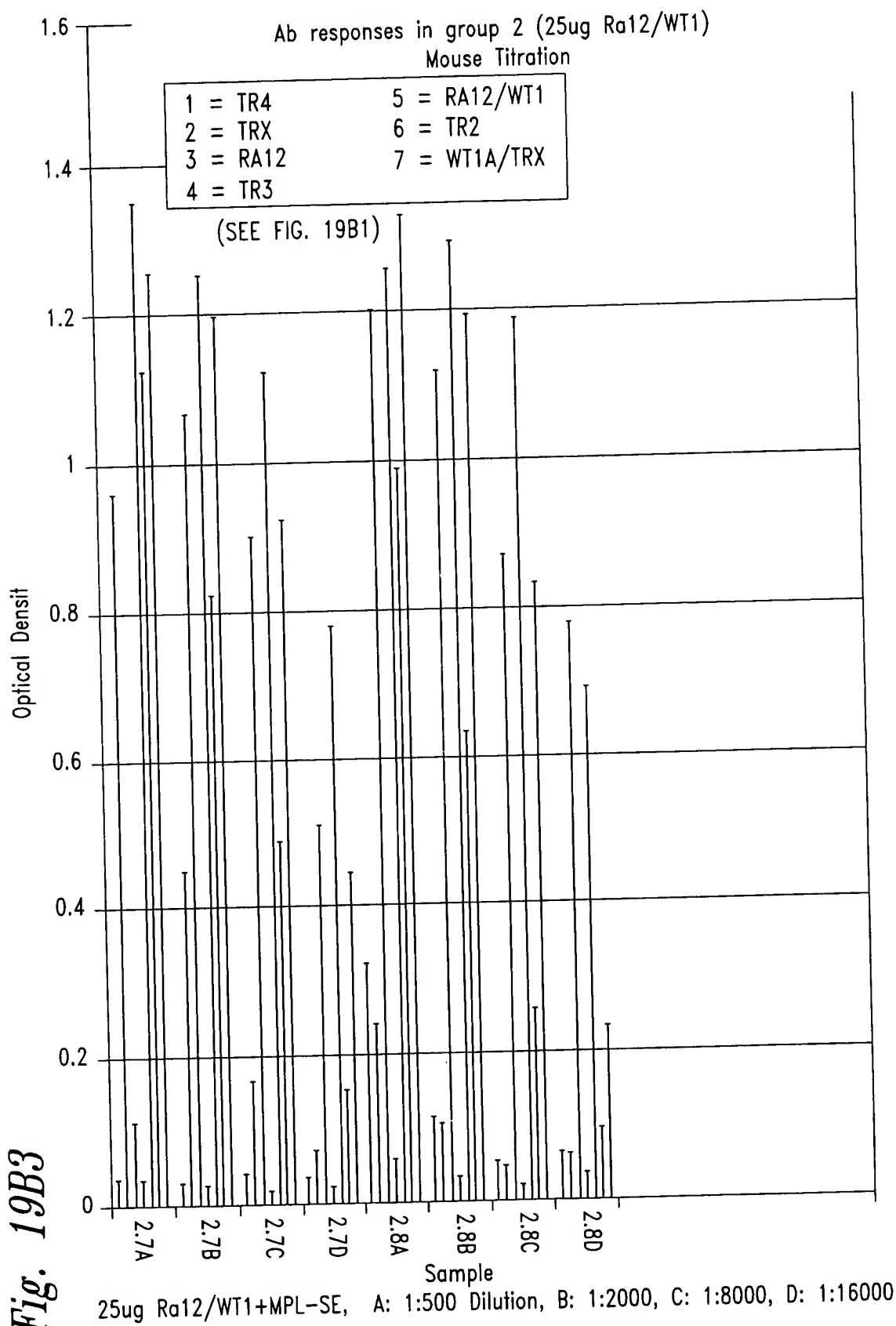


Fig. 19B3

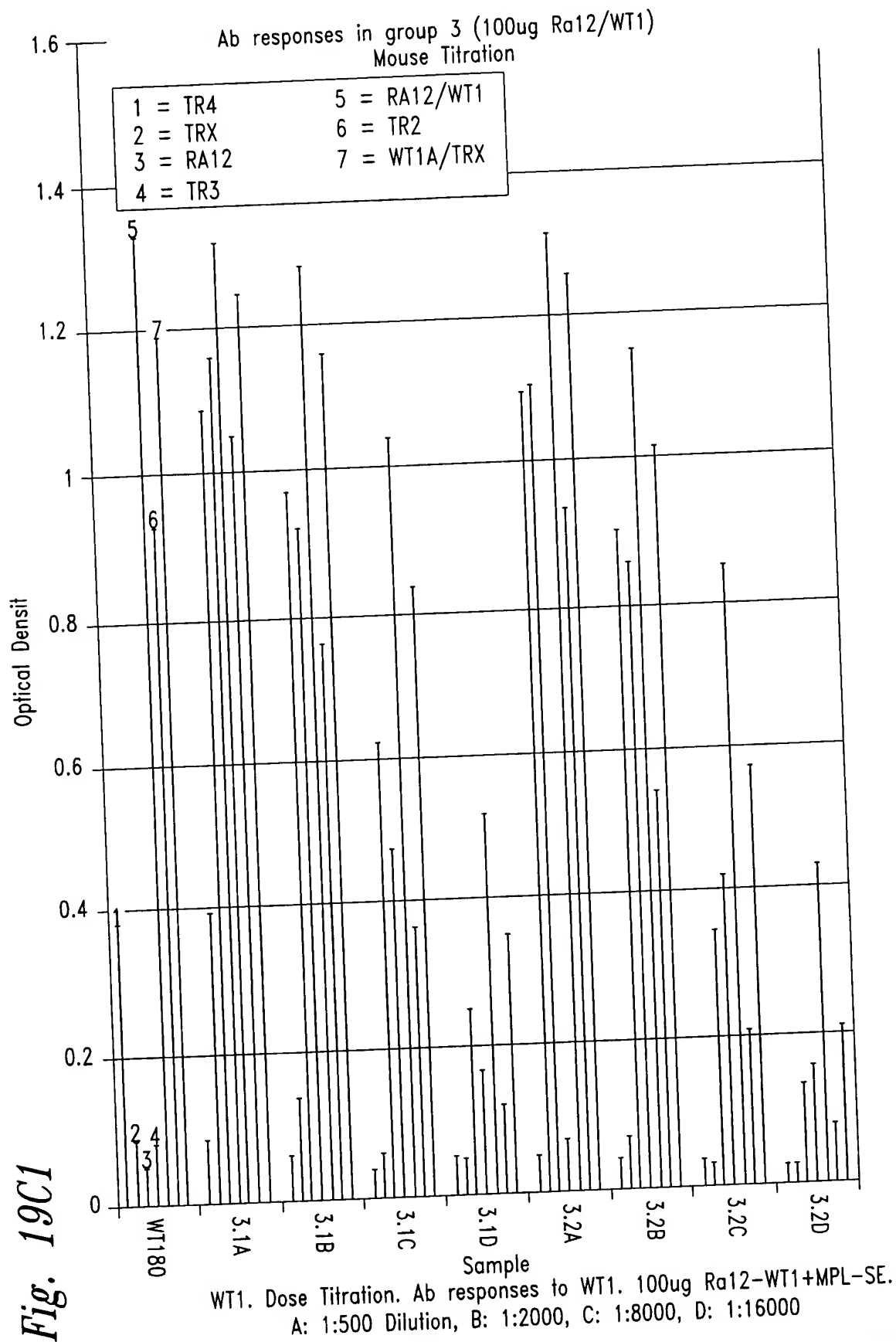


Fig. 19C1

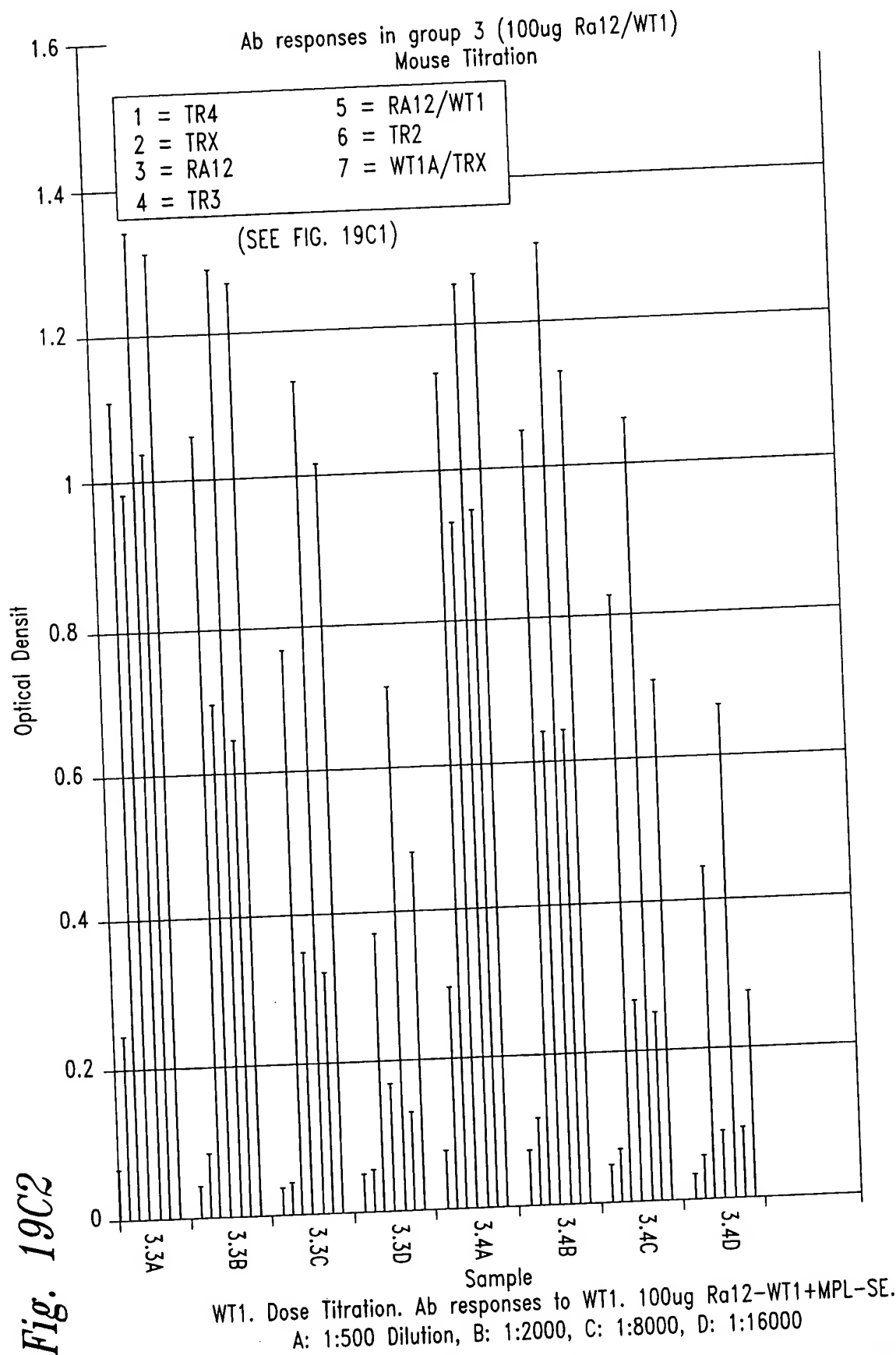


Fig. 19C2

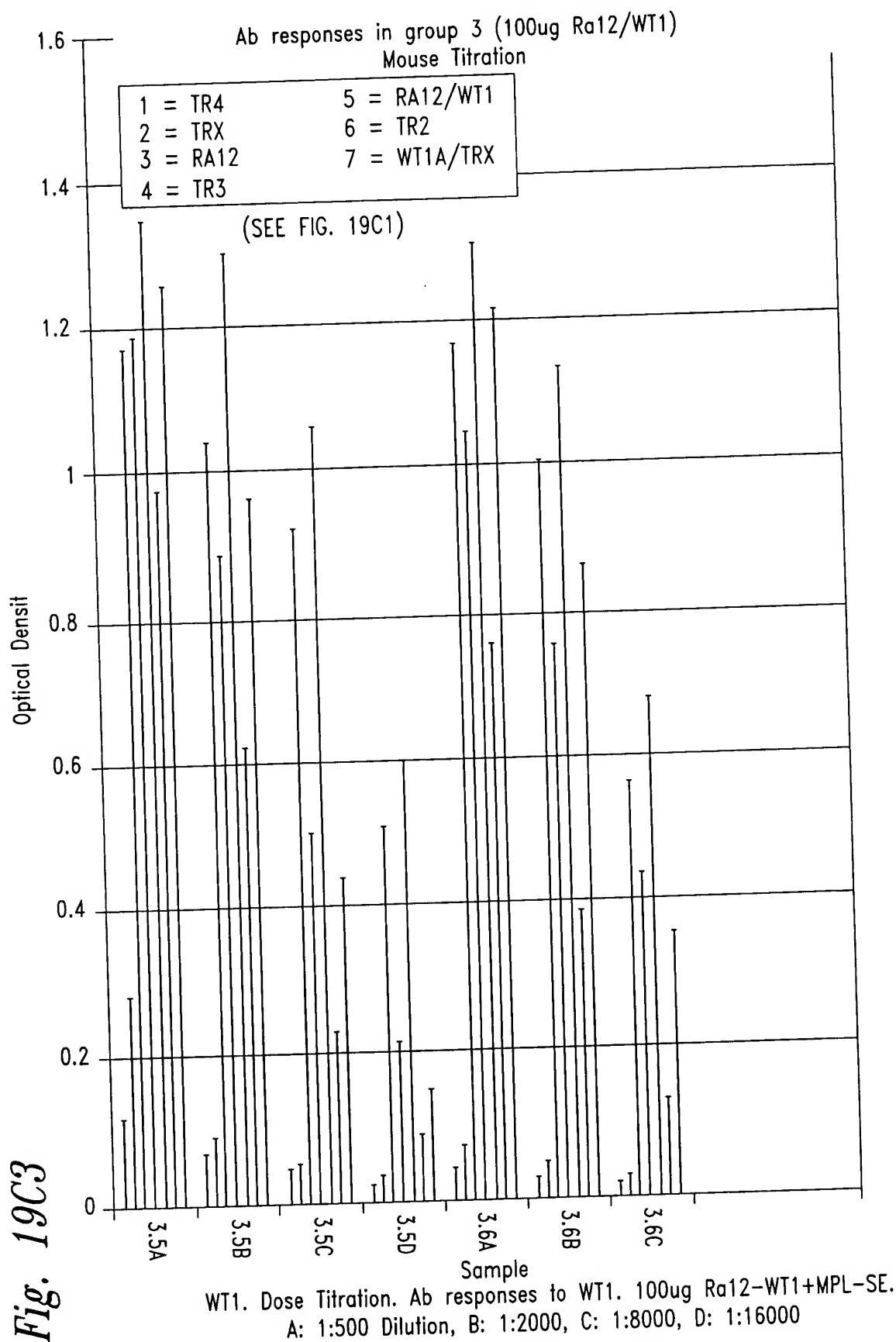


Fig. 19C3

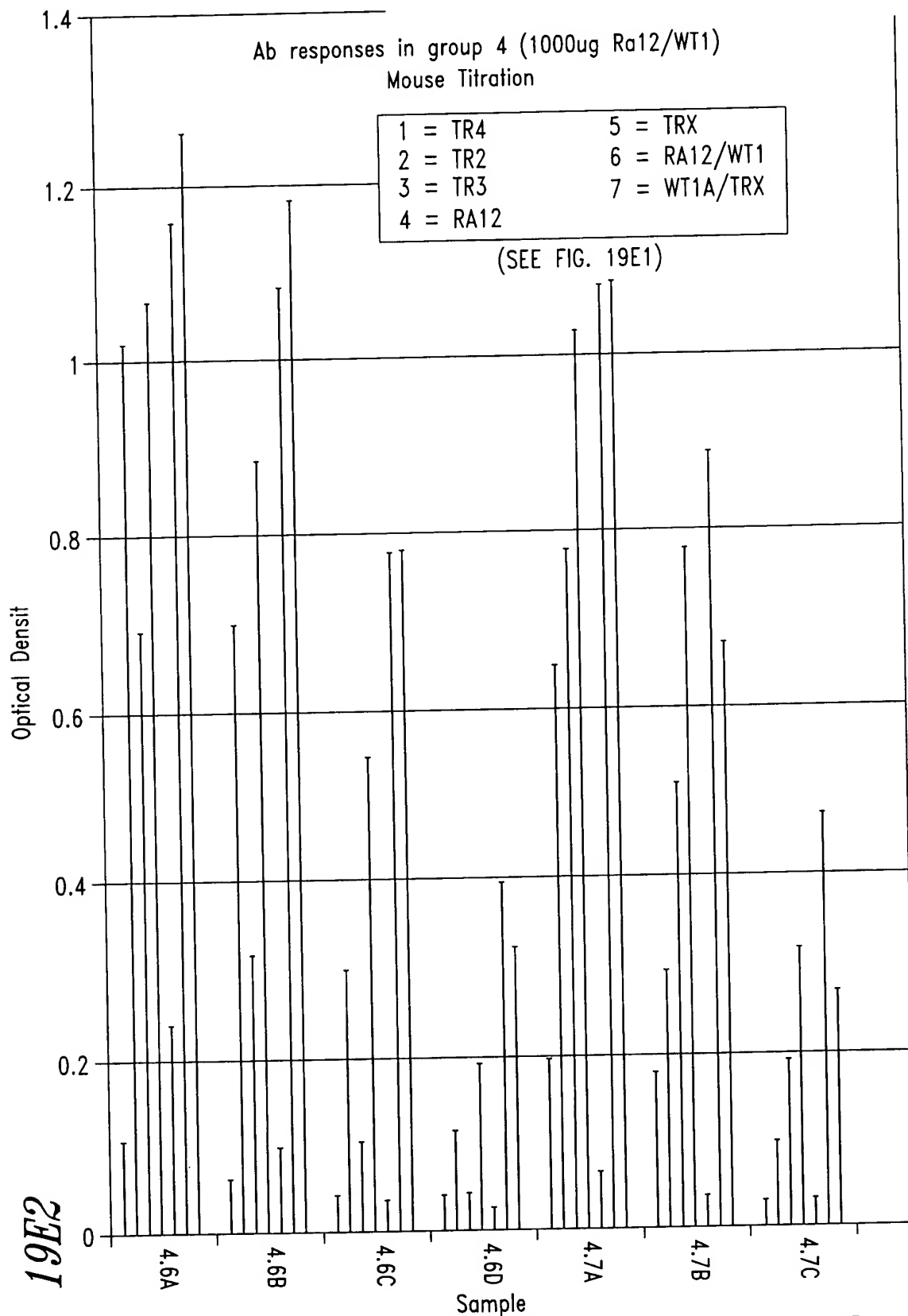


Fig. 19E2

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

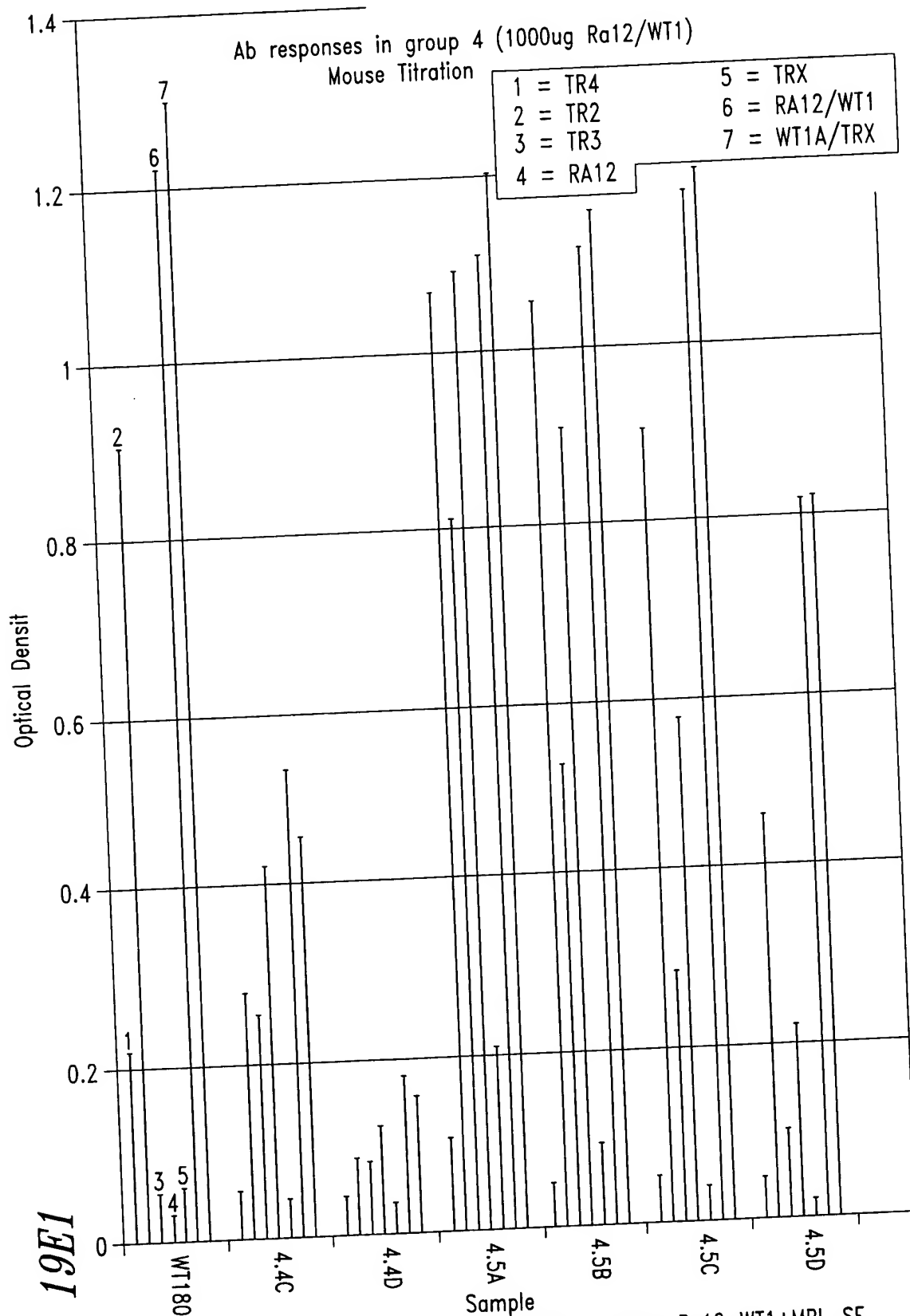


Fig. 19E1

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

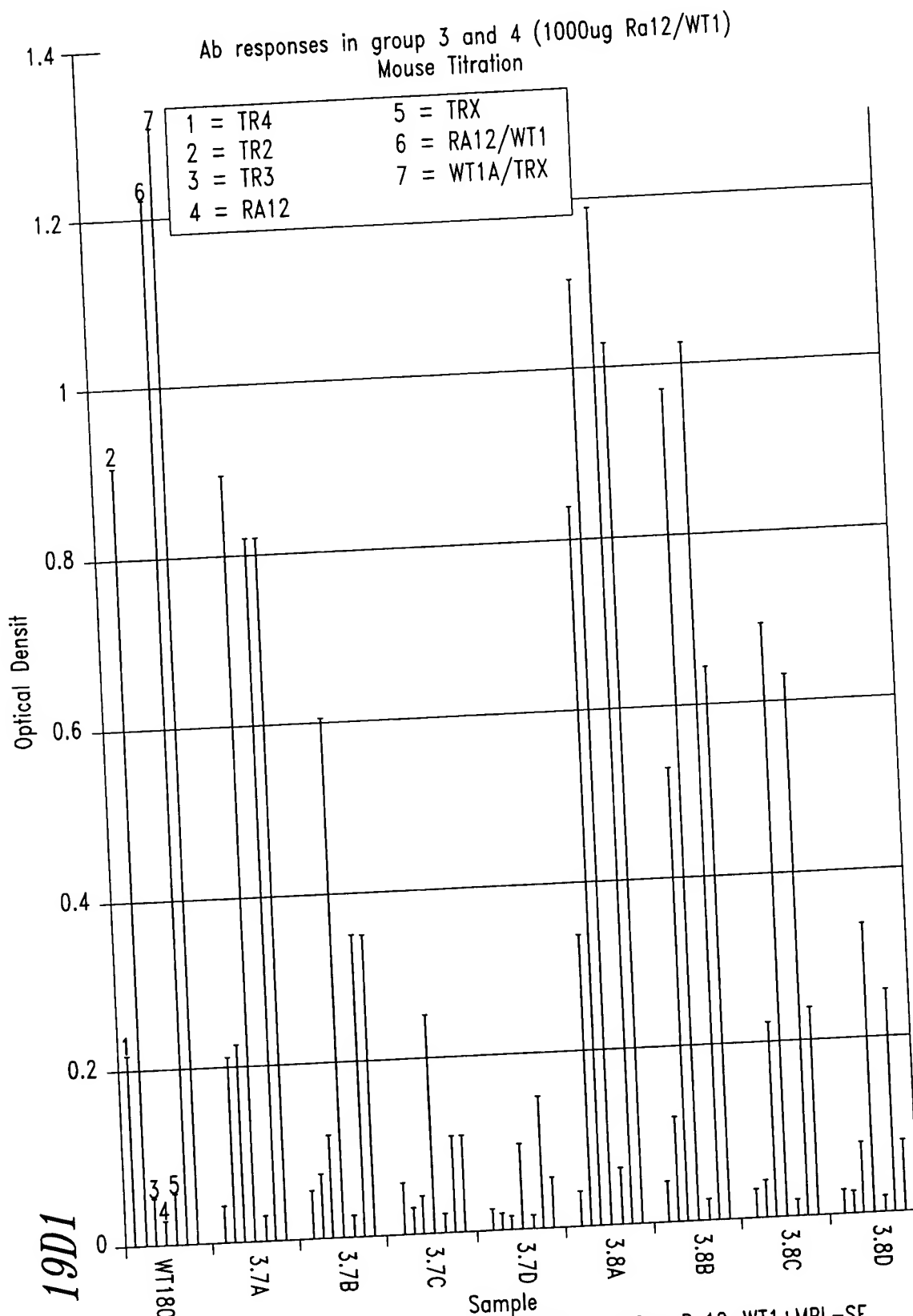


Fig. 19D1

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

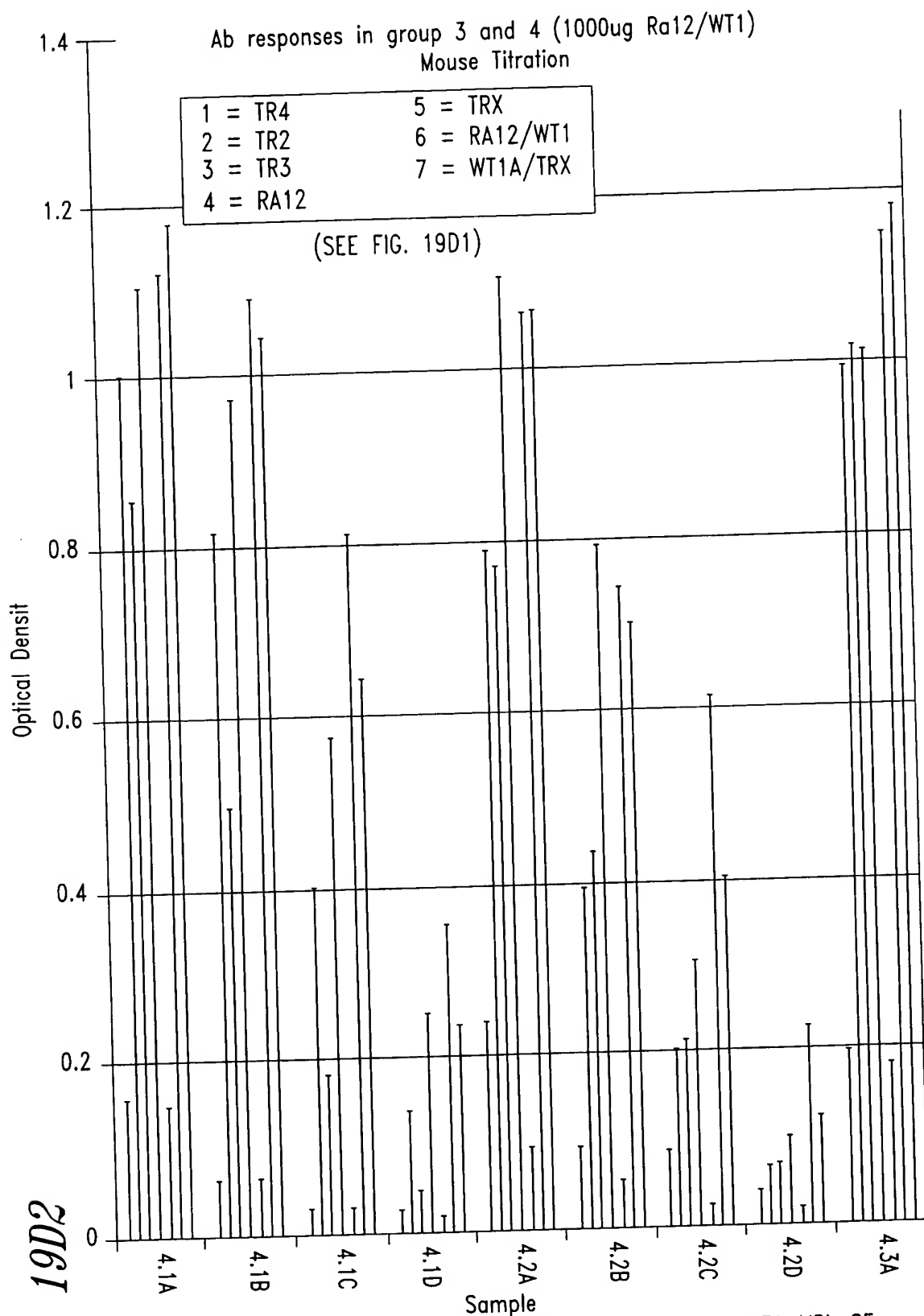


Fig. 19D2

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

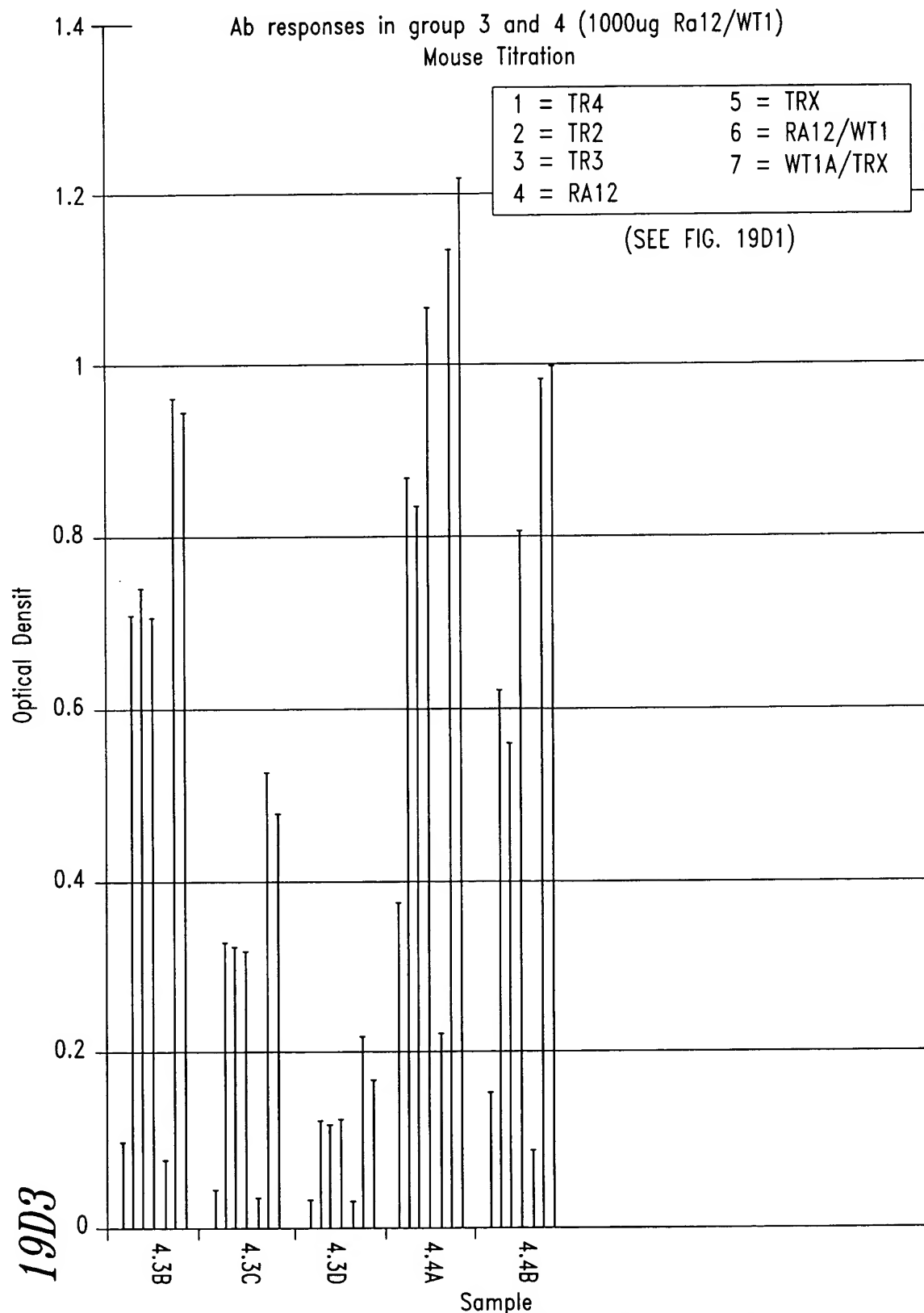


Fig. 19D3

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
 A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

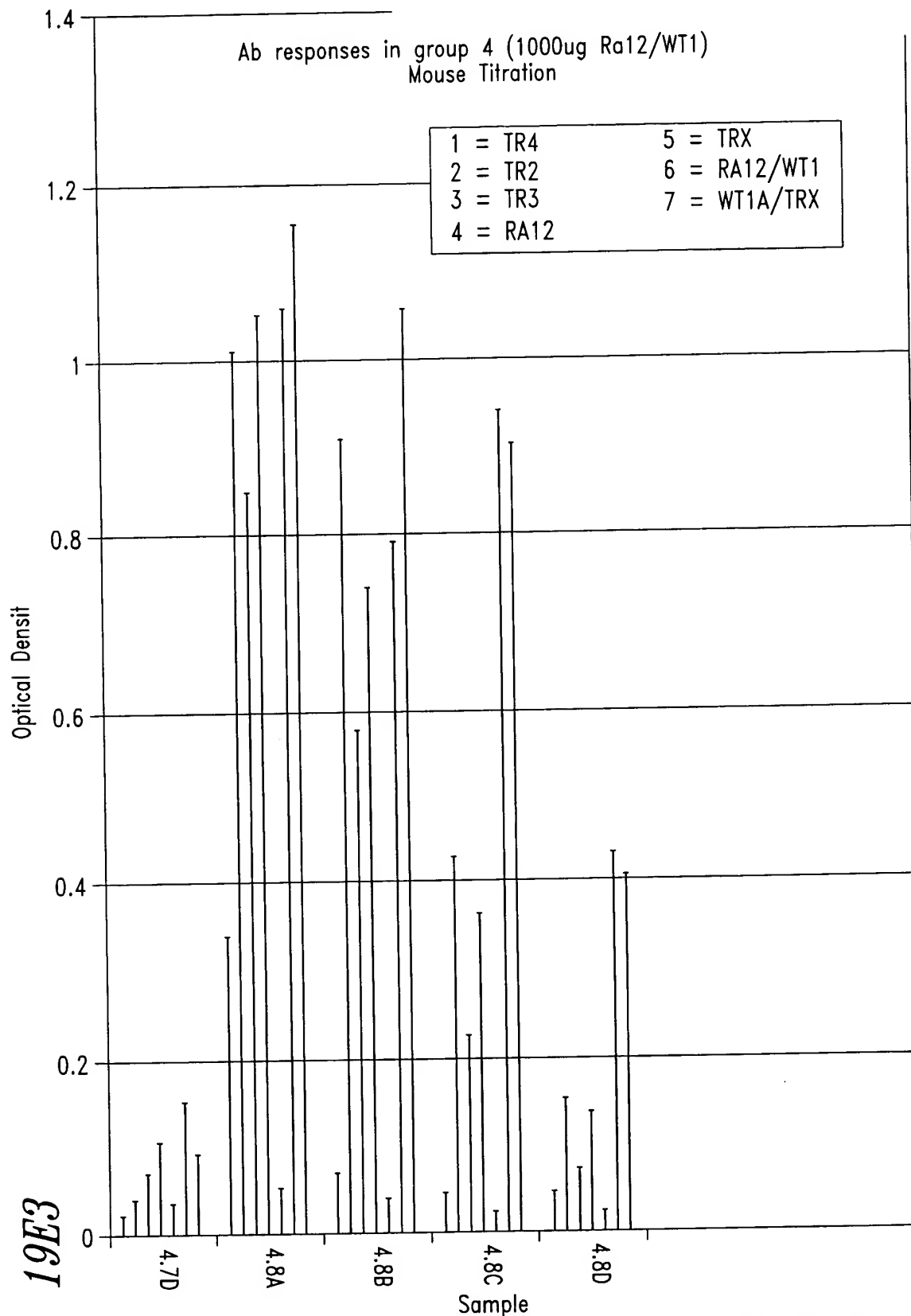


Fig. 19E3

WT1. Dose Titration. Ab responses to WT1. 1000ug Ra12-WT1+MPL-SE.
A: 1:500 Dilution, B: 1:2000, C: 1:8000, D: 1:16000

FIG. 20A

Proliferative T-cell responses in WT1 protein immunized mice. (Ra12WT1 dose titration, 3x in vivo, after 2IVS)

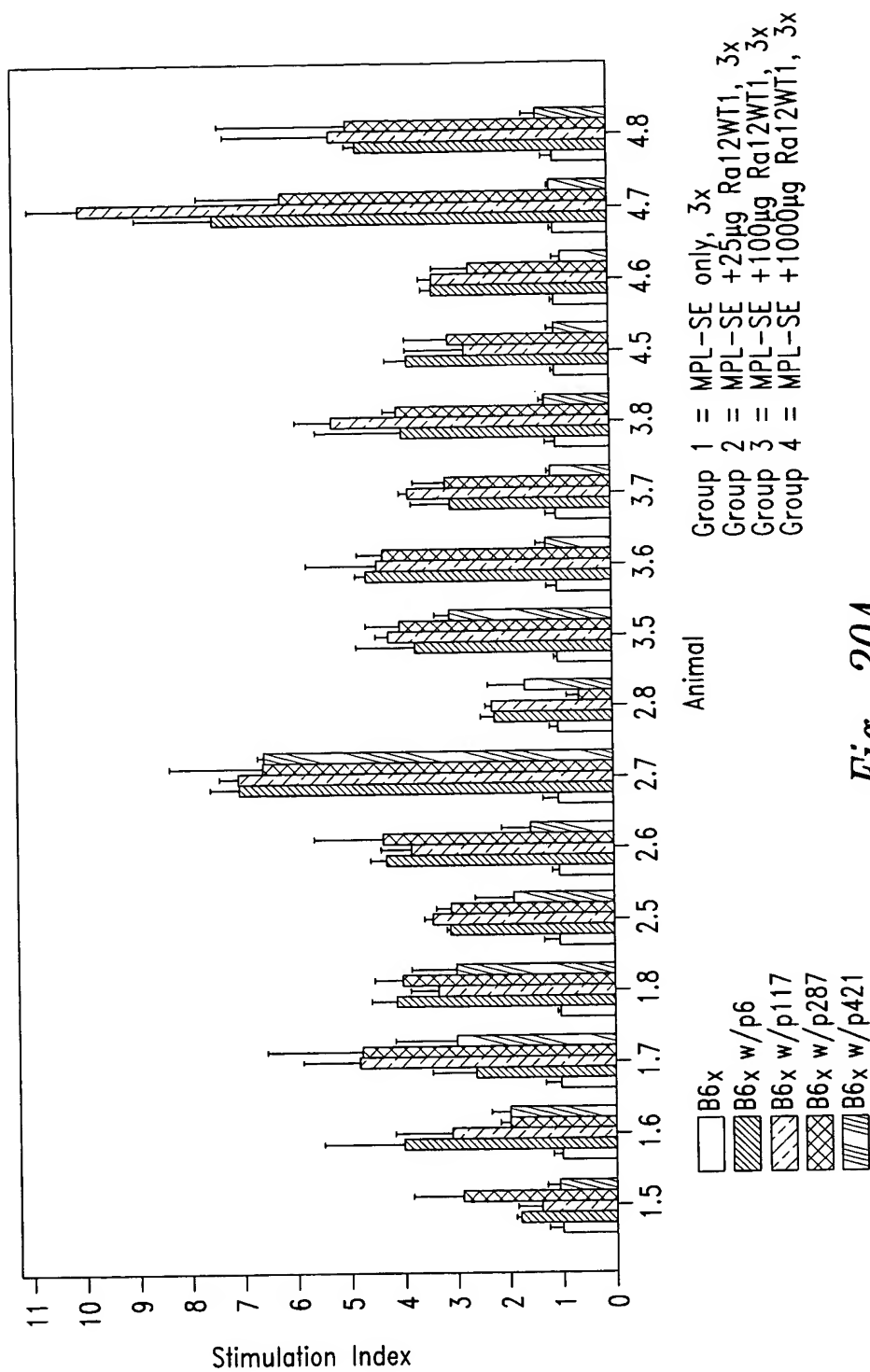


Fig. 20A

FIG. 20B

Proliferative T-cell responses in WT1 protein immunized mice. (Ra12WT1 dose titration, 6x in vivo, after 2IVS)

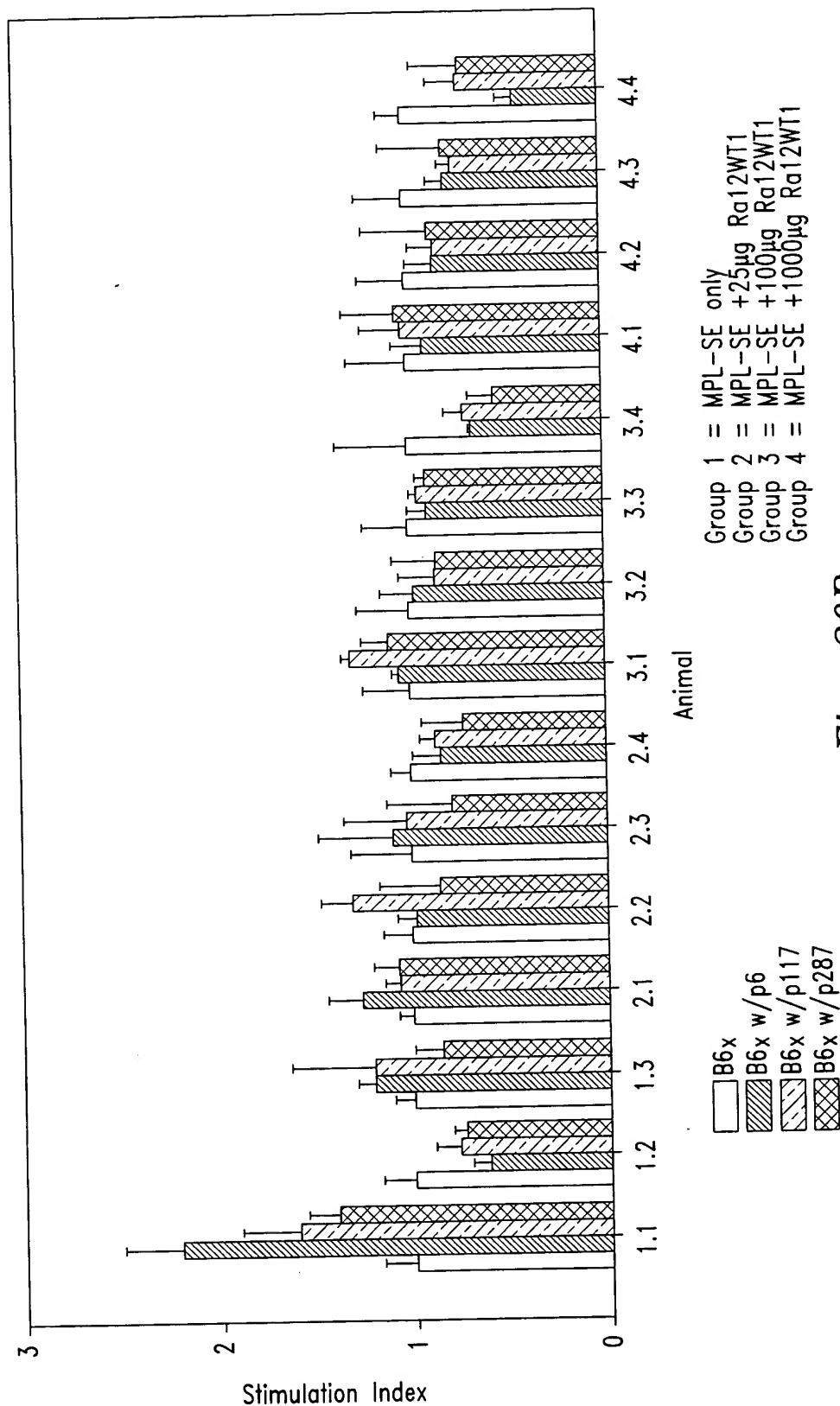
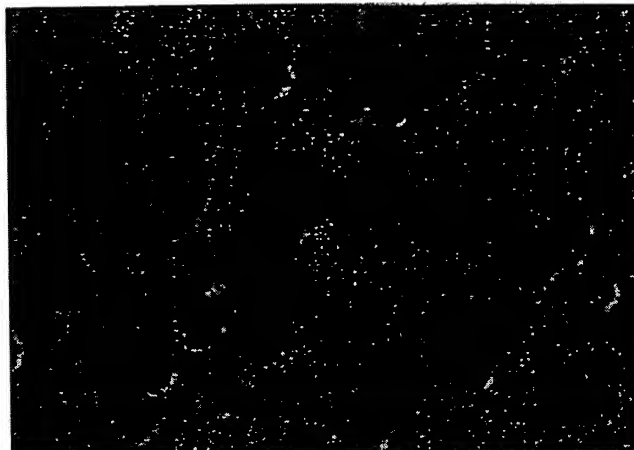


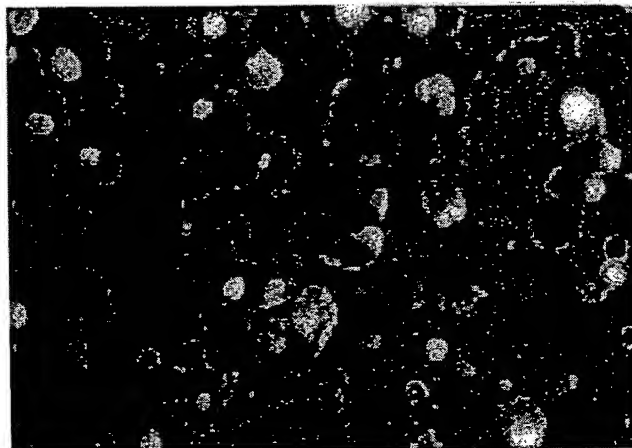
Fig. 20B

WT1 expression in human DC following adeno
WT1 and Vaccinia WT1 infection

Control
(uninfected human DC)



Adeno WT1
(infected human DC)



Vaccinia WT1
(infected human DC)

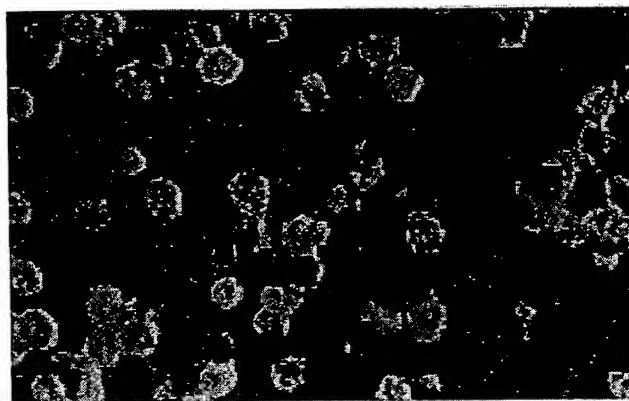
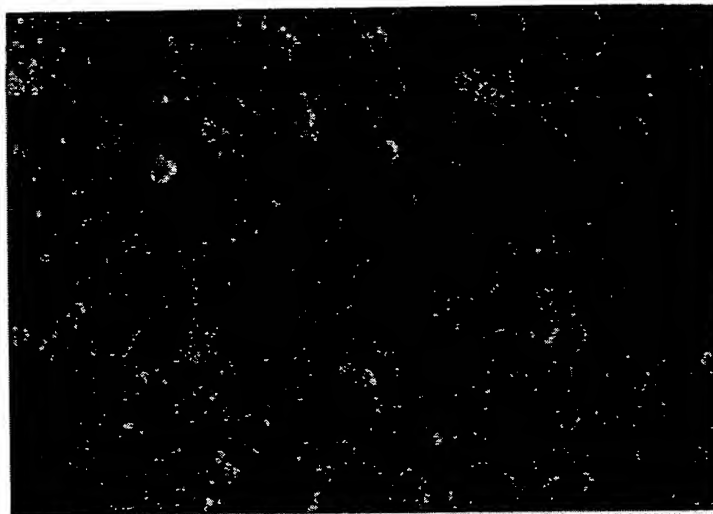


Fig. 21

WT1 can be expressed reproducibly in human DC
following adeno WT1 infection and is not
induced by a control Adeno infection

Control
(Adeno EGFP
infected human DC)



Vaccinia WT1
(infected human
DC)

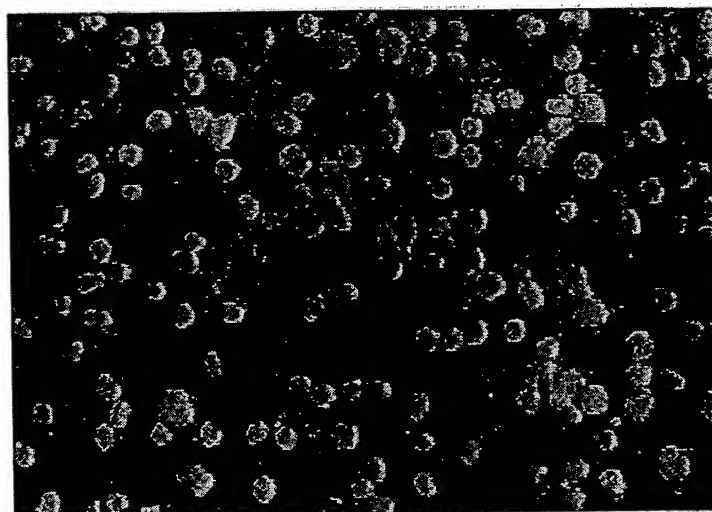


Fig. 22

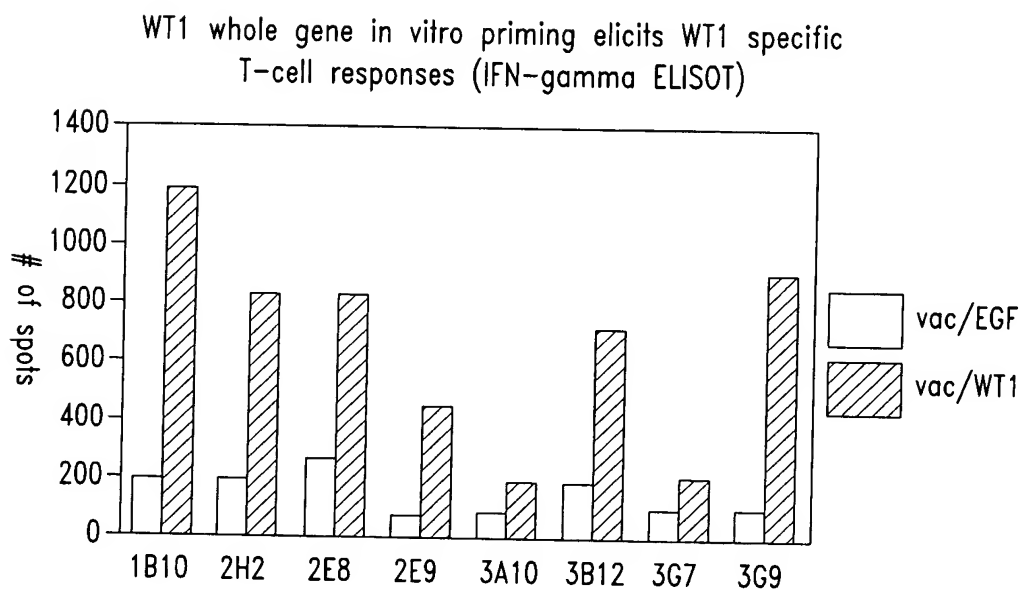


Fig. 23